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NBGS 8 JAN 24 The new and emhanced RPLF file on STN has been released NBGS 9 JAN 26 Improved Tineliness of CAS Indexing Adds Value to USPATFULD and USPATFULD and USPATFULD rew structured shottacts, and other emhancements improve searching in STN reload of MEDILNS
NBGS 11 JAN 26 CAR will be updated weekly
NBGS 17 FAS 27 DeTFULD file on STN completely reloaded
NBGS 13 FAS 23 STN Analyst Test Projects Now Available for Obalified Contents

NOWS 13 FEB 23 STM Analyst Test Projects Now healtable for
Qualified Oustoners
NOWS 14 FEB 55 LEDT will be replaced by LOPCI
NOWS 15 MRR 07 Pricing for SELECTING Petent, Application, and Priority
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NOWS 16 MRR 08 Expanded Sending Petent, Application Coverage in CA/CApplus
Provides More Current and Complete Information
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NEWS EXPRESS 17 DECEMBER 2010 CURRENT WINDOWS VERSION IS V8.4.2 .1. AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011.

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=> FILE REGISTRY

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FILL ESTIMATED COST

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-Ch 11-

chain nodes : ring nodes : 1 2 3 4 5 6 7 8 9 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 exact bonds : 1-11 4-12 7-8 8-9 isolated ring systems : containing 1

Match level: liAton 2:Aton 3:Aton 4:Aton 5:Aton 6:Aton 7:Aton 8:Aton 9:Aton 11:Aton 12:Aton

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=> s 11 sss ful1

FULL SEARCH INITIATED 08:00:48 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 3327 TO ITERATE

100.0% PROCESSED 3327 ITERATIONS SEARCH TIME: 00.00.01

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FULL ESTIMATED COST

66 SRA SSS FUL L1

SINCE FILE SESSION ENTRY 196.86 197.32

66 ANSWERS

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5 ANSWERS

http://www.cas.org/sapport/stngen/stndcc/properties.html

=> s 12 SAMPLE SEARCH INITIATED 08:00:55 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 144 TO ITERATE

100.0% PROCESSED 144 ITERATIONS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** PROJECTED ITERATIONS: 2160 TO 36 5 TO 234

5 SEA SSS SAM LL

⇒ d 13 ibib abs hitstr 1-'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISIRY' 'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISIRY' 'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISIRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RM = CAS Registry Number)

- NN
- Index Name, MF, and structure - no RN
- All substance data, except sequence data
- FIDE, but only 50 names

SQIDE - IDE, plus sequence data SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN SQD3 - Same as SQD, but 3-letter amino acid codes are used

SON - Protein sequence name information, includes RN

EPROP - Table of experimental properties

PPROP - Table of predicted properties PROP - EPROP, ETAG, PPROF

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS - Abstract
APSP - Application and Priority Information
BIS - CA Accession Wumber, plus Bibliographic Data
CAN - CA Accession Wumber, plus Bibliographic Data
CRIB - CA Accession Wumber, plus Bibliographic Data (compressed)
DIO - Index Data
IPC - International Patent Classification

PAIS -- PI, SO SID -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ------ AM, plus Bibliographic Data (original) OIBIB ----- OBIB, indented with text labels

with text labels.

The ALL format gives FIDE BIB ARS IND RE, plus sequence data when it is available

The MAX format is the same as ALL plus SPEC The IALL format is the same as ALL with BIB ABS and IND indented,

For additional information, please consult the following help

HBLP DFIELDS -- Io see a complete list of individual display fields. HBLP FORMNIS -- To see detailed descriptions of the predefined formats BUTER DISPARY FORMAT (IGB): "Y" IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

- RN
- Index Name, NF, and structure - no RN
- All substance data, except sequence data
- FIER, but only 50 names
- IDE, plus sequence data
3 - Same as 50(IDE, but 3-letter amino acid con
Receive sequence data

SQD - Protein sequence data, includes RN SQD3 - Same as SQD, but 3-letter amino acid codes are used SQN - Protein sequence name information, includes RN

EPROP - Table of experimental properties PPROP - Table of predicted properties PROP - EPROP, ETAG, PPROP

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats obtain CA references citing the substance. The substance must be cited first. The CA File predefined formats are:

ABS -- Abstract

ASS - Abstract
APPS - Application and Priority Information
BIB - CR Accession Number, plus Bibliographic Data
CRN - CR Accession Number
CRS - CR Accession Number
CRS - CR Accession Number, plus Bibliographic Data (compressed)
IND - Index Data
IPC - International Patent Classification
PRIOR - PT, SO
SID - BIB, IPC, and NCL

IABS -- ABS, indented, with text labels

IBIB -- BIB, indented, with text labels ISTD -- STD format, indented

OBIB ------ AM, plus Bibliographic Data (original) OIBIB ----- OBIB, indented with text labels

SRIR ----- RIR no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL plus SPEC.

The IALL format is the same as ALL with BIB ABS and IND indented,

with text labels. For additional information, please consult the following help

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http://www.cas.org/support/stngen/stndcc/properties.html

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chain nodes : 11 12 ring nodes : 1 2 3 4 5 6 7 8 9 chain bonds : 1-11 4-12 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 exact bonds : 1-11 4-12 7-8 8-9 isolated ring systems containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:Atom

⇒ s 14 sss full FULL SEARCH INITIATED 08:01:21 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED = 3327 TO ITERATE

100.0% PROCESSED 3327 ITERATIONS SEARCH TIME: 00.00.01

66 ANSWERS

66 SEA SSS FUL L4

⇒ file caplus COST IN U.S. DOLLARS SINCE FILE ENTRY 196.86

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FILE COVERS 1907 - 15 Jun 2011 VOL 154 ISS 25 FILE LAST UPDATED: 14 Jun 2011 (20110614/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2011 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2011

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This file contains CAS Registry Numbers for easy and accurate substance identification

⇒ s 15 L6 31 L5

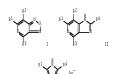
=> d 16 ihib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 31 AMSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 31 CAPUUS COPPENER 2011 ACS on STN
ACCESSION MORBER: 2010:205445 CAPUUS Full-text
DOCMENT NUMBER: 152:257118
Anale or imidazole-type fluorescent dyes for
biconolecule detection with improved water solubility
and labeling efficiency
DAVENIOR(5): Looke, Shinichire, Mataga, Shumtaro

Japan Jpn. Kokai Tokkyo Koho, 24pp. CODEN: JKKKAF PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: 2 FAMILY ACC. NUM. COUNT: 1

PATENT NO. KIND DATE APPLICATION NO. DATE A 20100218 JP 2008-205238 JP 2010037511 20080808 PRIORITY APPLN. INFO.: MARPAT 152:257718



AB The scale-type fluorescent dyes are depicted as I (scale N may be replaced with CR4 or N=7.Am-; R1 or N4 = LM; M = (um) substituted N cation—or N-containing group: 1 (linker] = (CR:CR5)m; n = 1-5; R6 = N, (um) substituted alkyl, soft, pet. p2, N5, the rest of Al and R4 = A, halo, (um) substituted aromatic/Aliphatic hydrocarbyl or heterocyclic group; N = (um) substituted C, N, S, O, So, or S; R' = (creation irright-containing) sliphatic/aromatic hydrocarbyl; An = halide, CT5501-, R8-7, FF6-). The imidstole-type fluorescent dyes are depicted as II or III (Scale N may be replaced with CR5, N=R*, -1 of distole N may be replaced with N=R*, Rab- if scale N is replaced with N=R*, Rab- if of R1, As = N may be replaced with N=R*, Rab- if acole N is replaced with N=R*, Rab- if of R1, As = N may be replaced with N=R*, Rab- if acole N is replaced with N=R*, Rab- if of R1, As = N may be replaced with N=R*, Rab- if one N may be replaced

reagent|; USES (Uses| (fluorescent dye or intermediate; azole- or inidazole-type fluorescent

dyes bearing N cation- or N-containing groups for biomol. detection with improved water solubility and labeling efficiency) RN 1208079-94-0 CAPLUS

CN [1,2,5]Oxadiazolo(3,4-c]pyridine, 4,7-bis(4-methoxyphenyl)-6-[2-(3-pyridinyl)ethenyl]- (CA INDEX NAME)



1500307-56-25

Mr. MG (Realytical reagect use): DMF (Industrial manufacture); MNST (Mealytical study): PMED (Preparation); CMES (Uses) ((Inucacent dye; asole- or inidasole-type floorescent dyes bearing N cations of Norontaining groups for himon. detection with improved water solumility and labeling efficiency)
1200379-56-2 CARUSS

(Priditium, 3-[2-[4], 7-bit (4-methoxyphemyl) (1,2,5) oxadiazolo (3,4-c)gyridin-6-(1)terpyl-1-[6-(2,5-diozo-1-gyrrolidinyl-(oxy)-6-oxobexyl-), bronide (1:1) (CA INGEN NOME)

II N555-75-02 657040-00-03 1308078-03-39 1202075-91-79 1008078-52-25 RL: IM7 (Industrial manufacture); RCI (Reactant); PREP (Preparation); RMCI (Reactant or reagent)
(intermediate; azole- or imidazole-type fluorescent dyes bearing N

(intermediate; abuse or intoacous-type fluorescent types bearing to cation— or N-containing groups for bicasol, detection with improved water solubility and labeling efficiency) 76593-55-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INDEX NAME)

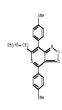
857048-00-1 CAPLUS
[1, 2, 5] Oxadiazolo[3, 4-c] pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

1208079-89-3 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-methanol, 4,7-bis(4-methoxyphenyl)-(CA INDEX NAME)

[1,2,5]Oxadiazolo[3,4-c]pyridine, 6-(chloromethyl)-4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)



 $\label{localization} $$1208079-93-9$ CAPLUS $$Phosphonium, [[4,7-bis(4-nethoxyphenyl)][1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]sethyl]triphenyl-, chloride [1:1] (CA RUGEX NAME) $$$$



L6 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN

JUDS CUPYRIGHT ZULL ACS on SIN
2009:138769 CAPLUS Foll-text
150:163168
Diagnostic agent, and diagnosis method using it
Isobe, Shinichiro

PATENT ASSIGNEE(S): Japan PCT Int. Appl., 86pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: Ja FAMILY ACC. NUM. COUNT: 1 Japanese

PATENT INFORMATION: DATENT NO KIND DATE ADDITION NO DATE MO 2009016718 A1 20090205 MO 2007-JP64894 2: M: AE, AG, AL, AM, AT, AU, AE, BA, BB, BG, BH, ER, BM, BY, 20070730 CH. CN. CO. CR. CU. CT. DE, DK. DK, DK, DD. DT. EC, EE, BS. ES, FI.
GS. CD. GE, CH. GM, GT, HM, HR, HJ, DJ. LL, TM, LS, JP, H3, NG,
HM, NS, EP, RS, LE, LA, LC, LK, EM, LS, LT, LD, LT, RB, NG, NG,
HG, HK, MM, MH, KH, MR, LB, NG, NG, ND, NG, CM, EP, EP, EP, L,
PJ, BO, BS, MJ, SC, SD, SE, SG, SS, SL, MS, SY, ST, LJ, TM, TM,
TR, TT, TT, US, DG, DG, UT, UC, NG, AJ, MG, MB
EM: AT, BE, BG, CH, CT, CT, DE, DM, EB, ES, FL, FR, GG, RH, ML,
SJ, CF, CG, CT, CT, CM, GM, GG, GM, ML, MR, NE, SM, TD, TG, BM,
GH, GC, RE, LS, MM, NH, NB, SD, SD, LS, TJ, UG, 2M, MM, MM, AL,
ST, MG, TM, ND, SU, DJ, TM

PRIORITY APPRIL NEW:

WARREST 150:10869

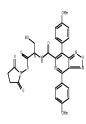
It is intended to provide a diagnostic agent possessing a high antibody.

- PRIORITY APEM. INFO.: WO 2007-D964894 20070730 CTURES COUNTL(S): WARRA LIST-LISTORS WO 2007-D964894 20070730 CTURES COUNTL(S): WARRA LIST-LISTORS WARRA LIST-LISTOR AND ADMINISTRATION OF THE STATE ADMINISTRATION OF THE STAT

- (diagnostic agent/method using high intensity fluorescent dye for labeling antibody) 921934-98-7 CAPLUS
- B-Alanine, N-[[4,7-bis(4-methoxypheny1)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

921935-04-8 CAPLUS L-Serine, N-[[4,7-bis(4-methoxypbenyl)[1,2,5]oxadiazolo(3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

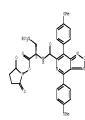
Absolute stereochemistry.



921935-06-0 CAPLUS L-Alanine, N-[{4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl)carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

CN D-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl]carbonyl]-3-sulfo-, 1-(2,5-dioxo-1-pyrrolidinyl) ester (CA INDEX NAME)

Absolute stereochemistry.



II 255791-23-59 855701-54-99 257645-00-09 921554-97-89 521935-01-50 921555-03-079

National Personal (Reactant); SPN (Synthetic preparation); PRED (Preparation); RACI (Reactant or reagent) (diagnostic agent/method using high intensity fluorescent dye for

labeling antibody| 855781-83-8 CAPLUS

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)



855781-84-9 CAPLUS

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



857048-00-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

921934-97-6 CAPLUS

β-Alanine, N-([4,7-bis(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl)- (CA INDEX NAME) CN

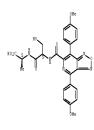
RN 921935-01-5 CAPLOS
CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl) [1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INDEX NAME)

921935-03-7 CAPBUS L-Serine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEN NAME)

Absolute stereochemistry.

921935-05-9 CAPLUS

CN L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl]carbonyl]-L-seryl- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REPERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

LANGUAGE:

PATENT INFORMATION:

DOCUMENT TYPE: Patent Japanese FAMILY ACC. NUM. COUNT: 1

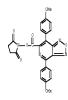
PATENT NO. KIND DATE APPLICATION NO. DATE A 20081127 JP 2007-133009 JP 2007-133009

obsystating tissue or cells collected from a test subject using a desystating agent consisting of an ether alc. (e.g., ethosyponapil or a glyting) ether. The method enables to prevent a sample from getting distorted or contracted to cause a change in his state or shape unlike the case with an alc. or actions which has been traditionally used, and thereby, realize a pathol. diagnosis with high reliability.

85782-95-95

AND (81-79-59-89
RL: ARU (Analytical role, unclassified), RCT (Reactant); SPM (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant

or reagent|
(Miol. Linume specimen production method using other alc. for debydration)
855 NR-84-9 CAPUDS
(12.25)Somaissolo(3.4-c)pyridine-6-carboxylic scid.
(12.25)Somaissolo(3.4-c)pyridine-6-carboxylic scid.
(CA INGEX NOME)



RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI No. NC (Reactant) SPH (Synthetic preparation); PREP (Preparation); PREP (Reactant or respect)

(Biol. tissue specimen production method using ether alc. for dehydration)

85781-83-80 CPHUM

[1, 2, 5]Okadiatoolo[3, 4-c)pyridine-6-carboxylic acid,

4,7-his(4-methoxyphenyl) - (CA INDEX (RME)

857048-00-1 CAPAUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

L6 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER:

2008:975444 CAPLUS Full-hext 149:225936 DOCUMENT NUMBER:

TITLE:

149:225936
Polymeriable asole fluorescent dyes with high fluorescent intensity and good weather resistance, and their navofacture and polymers
Laobe, Shinichiro; Mataga, Shuntaro; Mizuki, Keiji;
Taninaka, Ichiro; Kawashima, Shinichi; Isukuda,
Takahiko
Barina Chemicala, Inc., Japan
Jop. Rokai Jokky Enho, 20pp.
CCGEN: JENERS
Patent

INVENTOR(S):

DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: Japanese

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A 20080814 JP 2007-21687 JP 2007-21687 JP 2008184592 PRIORITY APPLN. INFO.: PRIORITY APPLAN. OTHER SOURCE(S): CASREACT 149:225936; MARPAT 149:225936

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

exposing to natural light under air at room temperature for 3 wk. IF = $255.98(-3).49^\circ$ = $88.046.40(-12)=921.835-97.43^\circ$

RL: IMF (Industrial manufacture); RCI (Reactant); PREP (Preparation); RACT

RE: DMC [Industrial manufacture]; RGI (Reactant); PREP (Preparation); PRC (Reactant) reagent] (polymerizable scole fluorescent dyes with high fluorescent intensity and good vesther resistance, and their manufacture and polymers) 855781-83-8 (ARUDS [1,25]Ostalisol[3,4-c]pyridine-6-carboxylic scid, 4,7-bis(4-methoxyphenyl) - (CA INDER URME)

857048-00-1 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-his(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



921935-07-1 CAPLUS [1,2,5]0xadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)

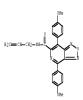


1043839-90-59 RE: DRY [Industrial manufacture]; RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

USSS (USes)

[polymerizable asole fluorescent dyes with high fluorescent intensity and good weather resistance, and their manufacture and polymers]

104389-39-5 (DARUS [
1,5,5]Okanisol(3,4-elpyridine-6-carboxanide, 4,7-his(4-sethoxyphenyl)-N-2-propen-1-yl- (CA INDEX NOME)



II 103592-64-92 102352-25-09 1561201-95-15
RE: BM7 [Industrial manufacture]; TBM (Technical or engineered material use); PREP (Peeparation); USES (Uses)
[polymerishle asole flowerseent dyes with high floorescent intensity and good weather resistance, and their manufacture and polymers]
NO 1043982-64-9 CAPLUS
CN [1,2,5] Obsatianolo[3,4-c]pyridine-6-carboxamide,
4,7-his(4-methoxyphenyl)-N-2-propen-1-yl-, homopolymer (CA INTEX NAME)

CM 1

CRN 1043892-90-5

CMF C23 H20 N4 O4

PN 1043892-95-0 CAPLUS
(1.2.5)Oxadiacolo(2,4-c)pyridine-6-carboxanide,
4.7-his(4-methoxyphenyl)-N-2-propen-1-yl-, polymer with ethenylbensene
(CA BUEN MANE)

CM 1

CRN 1043892-90-5 CMF C23 H20 N4 O4

CM 2

CRN 100-42-5 CMF C8 H8

RN 1043892-96-1 CAPLUS
CN 2-Propencic acid, 2-methyl-, methyl ester, polymer with
4,7-mis(4-methoxyphenyl)-N-2-propen-1-yl[1,2,5]oxadianolo[3,4-c]pyridine-6-

carboxamide (CA INDEX NAME)

CM 1

CRN 1043892-90-5 CMF C23 H20 N4 O4

CM 2

CRN 80-62-6 CMF C5 H8 O2

Maria Diagram

L6 ANSWER S OF 31 CAPAUS COPPRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:829336 CAPAUS Fall-text
DOORSEN NUMBER: 19:130464
Anol-based floorescent dyes and their preparation
Lindburg Number and Anol-based floorescent dyes and their preparation

PATENT ASSIGNEE(S):

Japan Jpn. Kokai Tokkyo Koho, 34pp. CODEN: JKKKAF SOURCE:

Patent

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

A 20080710 JP 2006-349504 JP 2008156556
PRIORITY APPLA . INFO .:
OTHER SOURCE(S): JP 2006-349504 CASREACT 149:130464; MARPAT 149:130464 * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The floorescent dyes are asoles I, II, or III [R] is DM in I and III; R1 or R4 is IM in I in M = (un) substituted pyridinium, anino, piperidinium, piperainium, inidanolium, thianolium, orasolium, benzindinum (n. 16.16 km) ensothianolium, benzonaolium (thianel eigent bond, (CEL)n (s = 1-4), NECO, COSM, COS, COSM, ENC.(NEUNR, O. S. NR, Ar. COMPUR (R = alaylı Ar = argleme); the rest of R1 and R4 in II, IR, 2, 28 = 8, halo, (un) membrituted aryl, aliphatic hydrocarbyl, beteroceptil; X = (un) substituted C, N. S. O. Se, or 8 atom; N° = (aromatic rine-containing alaylı, aryl; An = halice ion, CTSOO). PK-, PK-) pepared by reaction of haloslylc condex with animes. Pyridinum group-containing thiadisəlopyridine derivative diprained shiphintensity fluorescence io DMSO and in MO, showing the possibility of application to high-sensitivity detection of binomis.

(DNCAS-12-50
EX. IMP (Industrial noundacure); RCI (Reactant); SCM (Symthetic preparation); PREZ (Preparation); RCI (Reactant or rangent) groups as fluorescent

useful for high-sensitivity detection of biomols.) 1036253-18-5 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine, 4,7-diphenyl-6-(3-pyridinyl)- (CA INDEX



IT 1036253-21-69
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of azoles having N-containing cationic groups as fluorescent

upea useful for high-sensitivity detection of bicsols.)

80 105633-21-0 CAMEUS

COP Printinian, 1-(3-(12,3-dicson-1-pyrrolidiny|loxy|-3-exopropy|1-3-(4,7-dicheny|[1,2,5] candisolo[3,4-c]pyridin-6-y1)-, bromide (1:1) (CA INDEX NAME)

II 082438-35-6
RL: RCI (Reactant); RACI (Reactant or reagent)
(preparation of aroles having N-containing cationic groups as fluorescent

s useful for high-sensitivity detection of bicools.) 102114-23-6 CARGUS [1, 2,5]Onadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, propyl eater (CA IUECK NAME)

L6 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2008:777672 CAPLUS Full-text EOCUMENT NUMBER: 149:111760

hair compositions comprising a direct dye and a thickener DOCUMENT NUMBER: TITLE:

Plos, Gregory L'Oreal, Fr. Fr. Demande, 6 CODEN: PRXXBL INVENTOR (S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: E
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|--------|------------|-----------------|----------|
| | | | | |
| FR 2910277 | Al | 20080627 | FR 2006-55952 | 20061226 |
| RIORITY APPLN. INFO.: | | | FR 2006-55952 | 20061226 |
| THER SOURCE(S): | MARPAT | 149:111760 | | |

OHER SOURCE(s): MANDAY 149:111/60

The invention relates to a hist composition including a particular direct dye and a thickness. It also relates to a process of dying brans hair. Thus, a composition contained an onadianologynizine derivative 3 + 10-3 and 14, 800 6, parametes 0.06, hydroxysthyl collulose 1.72, polyplycoside S, benzyl alc. 4, water to 50%, and citrate buffer qs to 100%.

If 70%24-44-6 9673-45-6 9673-45-6 1005-66-1

9532-51-2 0539-58-3 6539-12-4 6572-51-8 5571-55-6 202239-71-3 20795-9-9-0 202359-71-1 5139-74-45 20755-12-5 26572-53-2 5139-8-6-1 95709-12-1 5059-51-5 50906-55-7 BELOGO (Consectious); BOOL Biological study); USES (Uses) (Dair compos. comprising direct dye and thickener) 10524-41-6 JAMUS [1, 2, 5] Osadianolo[3, 4-c] pyridine, 4, 6, 1-triphenyl- (CA INIEK NAME)

 $\label{eq:control_control_control} $$ 1,2,5]$ Ocardianolo(3,4-c) pyridine-6-carboxylic acid, 4,7-dipbenyl-, ethylester (CA INDEX NAME) $$$

76593-56-1 CAPLUS [1,2,5] Oxadiazolo[3,4-c] pyridine-6-carboxylic acid, 4,7-dipbenyl-, methyl ester (CA INDEX NAME)

76593-51-2 CAPUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX

76593-58-3 CAPUIS
Methanore, (4,7-diphenyl[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]phenyl- (CA
NDEX MOME)



85731-32-4 CAPLUS [1,2,5]Oxaddiazolo[3,4-c]pyridine-6-methanol, 4,7-diphenyl- (CA NUSEX NAME)



RN 85731-37-9 CAPLUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine, 4,7-diphenyl- (CA INDEX NAME)



85731-38-0 CAPIUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA INDEX NAME)

224430-73-3 CAPLUS
[1,2,5]Oxadiazolo[3,4-o]pyridine-6-carboxylic acid,
4,7-bis(4-chlorophenyl)- (CA INDEX NAME)

225795-70-0 CAPLUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



225795-71-1 CAPLUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)

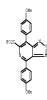


519182-44-6 CAPLUS (1,2,5)Oxadiazolo(3,4-c)pyridine, 4,7-bis(4-brosophenyl)-6-phenyl- (CA INDEX NAME)

847203-13-8 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-diphenyl- (CA INDEX NAME

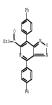


855781-83-8 CAPLUS [1,2,5]0xadiarolo(3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)

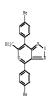


- 857048-00-1 CAPLUS
- (1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

- 865091-72-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis([1,1'-biphenyl]-4-yl)-, ethyl ester (CA INDEX NAME)



- RN 908866-53-5 CAPLUS
 CN [1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-his(4-methylphenyl)- (CA INDEX NAME)



- RN 908866-55-7 CAPLUS
 CN Ethanesulfonic acid, 2-[[[4,7-bis(4-methylpbenyl)[1,2,5]oxadiarolo[3,4-c]pyridin-6-yl]carbonyl]anino]- (CA INDEX NRME)

- REFERENCE COUNT:
- 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OP 31 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2000:177665 CAPLUS Full-text LOCUMENT NUMBER: 149:111759
TITLE: Hair compositions comprising dir

149:111759

Hair compositions comprising direct dyes and surfactants

Plos, Greepry

L'Oreal, Fr.

Fr. Demande, Sügp.

CUGEN: PRINEN

Patent

French PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: F FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

REPORT NO. | RATE | APPLICATION NO. | DATE |
DEPORT NO. | DATE | APPLICATION NO. | DATE |
DEPORT NO. | DATE | APPLICATION NO. | DATE |
DEPORT NO. | DATE | APPLICATION NO. | DATE | APPLICATION NO. |
DEPORT NO. | DATE | APPLICATION NO. | DATE | APPLICATION NO. |
DEPORT NO. | DATE | APPLICATION NO. | DATE | APPLICATION NO. |
DEPORT NO. | DATE | DATE | DATE | DATE |
DEPORT NO. | DATE | DATE | DATE | DATE |
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DEPORT NO. | DATE | DATE | DATE |
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DEPORT NO. | DATE | DATE | DATE |
DEPORT NO. | DATE | DATE | DATE |
DEPORT NO. | DATE | DATE | DATE |
DEPORT NO. | DATE | DATE | DATE |
DEPORT NO. | DATE | DATE | DATE |
DEPORT NO. |
DEP

RI: COS (Coanetic use); BEO((Biological study); USES (Uses)
(hair compra. comprising direct dyes and surfactants)
RN 126244-17-6 CAPLUS
CN [1,2,5]Oxadiazolo(3,4-c)pyridine, 4,6,7-triphenyl- (CA INDEX NAME)

DATE

RN 16593-56-1 CAPLUS
CN [1,2,5] Oxadiazolo[3,4-c] pyridine-6-carboxylic acid, 4,7-dipbenyl-, methyl ester (CA INDEX NAME)

RN 76593-55-0 CAPLUS
CN [1, 2,5]Oxadianolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INDEX NOME)

- 76593-57-2 CAPLUS
- $\hbox{\tt [1,2,5]0xadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX)}\\$



- Methanome, (4,7-diphenyl[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl|phenyl- (CA INDEX NAME)



- [1,2,5]Oxadiazolo[3,4-c)pyridine-6-methanol, 4,7-diphenyl- (CA INDEX



- ${\tt CN} \hspace{0.5cm} \textbf{(1,2,5)} \\ \textbf{0xadiazolo(3,4-c)pyridine, 4,7-diphenyl- (CA INDEX NAME)} \\$



- PN 85731-38-0 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA
 INDEX NAME)



- RN 224430-73-3 CAPLUS
 CN [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-chlorophenyl)- (CA INDEX NAME)



- RN 225785-70-0 CAPLUS
 CN [1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEK NAME)



- 225795-71-1 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)



- RM 519182-44-6 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine, 4,7-his(4-bromophenyl)-6-phenyl- (CA
 INDEX NOME)



- PN 847203-13-8 CAPAUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-diphenyl- (CA
 INDEX NAME)



- 855781-83-8 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-his(4-methoxyphenyl)- (CA INDEX NOME)

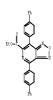


- 857048-00-1 CAPLUS
- [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



RN 865091-72-1 CAPLUS

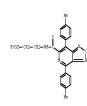
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis([1,1'-biphenyl]-4-yl|-, ethyl ester (CR INDEX NAME)



- 908066-53-5 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methylphenyl)- (CA INDEX NAME)



- RN 908866-55-7 CAPLUS
 CN Ethanesulfonic acid, 2-[[[4,7-bis(4-methylphenyl) [1,2,5]oxadiarolo[3,4-c]pyridin-6-yl] carbonyl]anino]- (CA INDEX NAME)



13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN PRUSS COMPIGENT 2011 ACS on STM
2008-549112 CASHOUS <u>Full-test</u>
148-505662
Comment compositions containing electroluminescent
dyes
Laobe, Shinichiro
Japan
Japan
Japan Rokai Tokkyo Rohn, 43pp.
COSEN: NURSP ACCESSION NUMBER:

DOCUMENT NUMBER:

INVENTOR(S):

DOCUMENT TYPE: Patent Japanese LANGUAGE: Je FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: KIND DATE PATENT NO. APPLICATION NO. DATE A 20080508 JP 2006-288905 JP 2006-288905 20061024 JP 2008105976

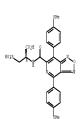
- (obes)
 (cosmetic compos. containing electroluminescent dyes)
 RM 857048-00-1 CAPLUS
 CN (1,2,5)@xadiazolo(3,4-c]pyridine-6-carboxylic acid,
 4,7-mis(4-methoxyphenyl)-, ethyl ester (CA NOEX RAME)



- 921934-97-6 CAPLUS
- $\begin{array}{lll} \beta\text{-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)} \end{array}$ CN

- 921935-01-5 CAPLUS
- L-Alanine, N=[(4,7-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl)carbonyl]-3-sulfo- (CA INDEX NAME)

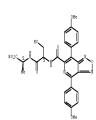
Absolute stereochemistry.



- RN 921935-03-7 CAPLUS
 CN L-Serine, N-[[4,7-his(4-methoxyphenyl)(1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

- 921935-05-9 CAPLUS L-Alanine, W-[[4,7-bis(4-methoxyphenyl)[1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INNEX NAME)

Absolute stereochemistry.

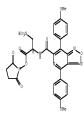


II 921554-92-09 521925-62-69 921555-62-69 821355-02-69

- 20133-0-0-09
 Bi: COS (Cosmetic use); SFN (Synthetic preparation); BIOG (Biological study); PFPP (Preparation); NSES (Uses)
 (cosmetic compos. containing electroluminescent dyes)
 FN 92194-94-7 (CAPUE)
 FN 92194-94-7 (CAPUE)
 (D P-Alazine, Pt.(4, T-bini4/caethoxyphenyl) [1, 2, 5] osadianolo[), 4| pypridis-6-yl] carboxyl]-, 2, 5-dicon-1-pyrrolidinyl ester (CA INDEX NAME)

- RN 921935-02-6 CAPLUS
 CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5] oxadiszolo[3,4-c]pyridin-6yl]carbonyl]-3-sulfo-, 2,5-dioxo-1-pyrrolidinyl ester (CR INDEN NAME)

Absolute stereochemistry.



921935-04-8 CAPLUS L-Serine, N-[[4,7-bis(4-methoxypbenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrolidinyl ester (CA INDEX NAME)

L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl)carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NOME)

Absolute stereochemistry.

IT 1021948-25-6

RE. RCI [Reactant]; RACI (Reactant or reagent)
[respectation of commetic compas. containing electroluminescent dyes)

RM 102148-25-6 CARUS

CI [1,2,5] Constantians[0,4,4-o]pyridine-6-carboxylic acid, 4,7-diptenyl-, propyl exter (CA INCEX NOME)

II 68572-63-67 95791-24-95
RL: RCI (Reactant); SRN (Synthetic preparation); PREP (Preparation); PRCI (Reactant or reagent)
(Research or reagent)
(Research or commercial compos. containing electroluminescent dyes)
(R 10, 2.5) Section 26.6 (April)
(1, 2.5) Section 26.6 (April)
(4, 1-bis(4-sethoxyphenyl) - (CA INDEX NOME)

RN 855781-84-9 CAPLUS
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxypbenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

L6 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:122337 CAPLUS Fall-text DOCUMENT NUMBER: 148:163065
TITLE: Biological specimen labeled with

148:153Ub3 Biological specimen labeled with novel fluorescent dye, and its preparation method Isobe, Shinichiro; Nakamura, Keiichiro; Kanemaru,

INVENTOR(S):

Takaaki PATENT ASSIGNEE(S):

Japan PCT Int. Appl., 91pp. CODEN: PIXXD2 LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PAT | ENI | NO. | | | KIN | D | DATE | | - | 1PPL | ICAT | ION I | 10. | | Di | ATE | |
|-----|------|------|------|-----|-----|-----|------|------|-----|------|------|-------|-----|-----|-----|------|-----|
| | | | | | | | | | | | | | | | | | |
| WO. | 2008 | 0132 | 60 | | Al | | 2008 | 0131 | - 1 | dO 2 | 007- | JP64' | 755 | | 2 | 0070 | 727 |
| | ₩: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | Βħ, | BB, | BG, | BH, | BR, | ВИ, | BY, | ΒΣ, | CA |
| | | CH, | CN, | CO, | CR, | CU, | CΣ, | DE, | DK, | DM, | DO, | D2, | EC, | EE, | EG, | ES, | FI |
| | | GB, | GD, | GE, | GH, | GM, | GI, | HN, | HR, | ΗU, | ID, | IL, | IN, | IS, | JP, | KE, | KG |
| | | KM, | W, | KP, | KR, | К2, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | ME |
| | | MG, | MK, | MN, | МW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | ΝZ, | œ, | PG, | PH, | P |
| | | Pī, | RO, | RS, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | IJ, | ΙM, | T |
| | | TR, | TI, | 12, | UA, | UG, | US, | Už, | VC, | W, | žA, | ZM, | 214 | | | | |
| | RW: | λī, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | PI, | FR, | GB, | GR, | HU, | I |
| | | IS, | II, | LΓ, | LU, | LV, | MC, | MT, | NL, | PL, | PT, | R0, | SE, | SI, | SK, | TR, | BE |
| | | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SW, | TD, | TG, | B |
| | | GH, | GM, | KE, | LS, | Mi, | MΣ, | NA, | SD, | SL, | S2, | 12, | UG, | 2M, | ZW, | AM, | A. |
| | | BY, | KG, | КΖ, | MD, | RU, | IJ, | TM | | | | | | | | | |
| HIY | APP | LN. | INFO | . : | | | | | | JP 2 | 006- | 2063 | 95 | | A 2 | 0060 | 728 |

OTHER SOURCE(S): MARPAT 148:163065

AB A hiol. specimen is provided, which can be prepared at low cost, and wherein fluorescence of a fluorescent dye does not disappear even after a long time

storage. Also disclosed are a method for preparing such a biol. specimen, and storage. Also disclosed are a method for preparing such a hiol. specimen, and a method for observing such a hiol. specimen. Specifically disclosed is a hiol. specimen, wherein tissue or cells labeled with a fluorescent dye is fixed onto a support base material. The fluorescent dye possesses a chromogenic portion composed of all least an organic EL dye, and the organic EL dye is composed of an anole derivative or inideable derivative which possesses a conjugated system, while containing more than one kind of heteroatom, selemina atom or horon atom. \$50020.44.5 2010-0-2.5 2010-0-2.5 \$1000-0-3.5 \$1000. (Biological study); USES (Uses)

(Uses)
(biol. specimen labeled with novel fluorescent dye, and preparation method)
855781-84-9 CAPMUS

RN CN

855/81-84-9 CAPMUS
[1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



921934-98-7 CAPLUS

β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME) CN

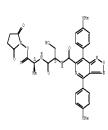
921935-02-6 CAPUNS L-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 921935-04-8 CAPLUS
CN L-Serine, N-[(4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo(3,4-c)pyridin-6-yl)carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

RN 921935-06-0 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl)][1,2,5] oxadiazolo[3,4-c]pyridin-6yl]carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.



II (0215) 6-25-6

II (2239-23-5

BL: BCI [Reactant]; RACI (Reactant or reagent)

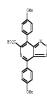
(miol. specimen labeled with novel fluorescent dye, and preparation method)

RN 102148-25-5 CAFLOX

(l.2,5)Sociations(o)[4,4-c]pyridine-5-carboxylic acid, 4,7-diptenyl-, propyl

ester (CA INUEX NAME)

II \$85721-33-20 \$27035-35-19 \$51972-37-50
20183-01-50 \$11275-35-10 20183-35-50
MR: BCT (Reactant); SRM (Synthetic preparation); PREP (Preparation); RACT (Reactant or respent)
(Biol. apecimen labeled with novel fluorescent dye, and preparation method)
CN (1, 2,5)Candisolo(3,4-c)pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl) - (CA INDEX NAME)



857048-00-1 CAPLUS

[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

RN 921934-97-6 CAPLUS

β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

RN 921935-01-5 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-metboxyphenyl][1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INDEX NAME)

921935-03-7 CAPLUS

L-Serine, N-[[4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L6 AMSMER 10 OF 31 CAPLUS COPPRIGHT 2011 ACS on STM
ACCESSION MOMBER: 2007:1389948 CAPLUS Foll-text
DOCMENT MAMBER: 148:7214

ITHE: Placescent dy-bound dispositic agent for labeling antibody, and dispositic method using it
INVALIDATES: Indeed, Shinichira

PATENT ASSIGNEE(S):

Japan Jpn. Kokai Tokkyo Koho, 47pp. CODEN: JKXXAF SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|--------|-----------|-----------------|----------|
| | | | | |
| JP 2007315779 | A | 20071206 | JP 2006-142648 | 20060523 |
| RIORITY APPLN. INFO.: | | | JP 2006-142648 | 20060523 |
| THER SOMEOFICE. | MARDAT | 148-23194 | | |

PRIORITY APPUN. INFO:
MAPRA 148:27194

AB A diagnostic agent is provided, which uses a fluorescent dye with high fluorescence intensity, and enthisits a high labeling state to an antibody. The diagnostic agent comprises at least an actiony and a fluorescent dye for labeling the antibody, wherein the fluorescent dye possesses a coloration part consisting of an organic electroluminescent [Gil dye and a limiting part for hinding with the antibody. The diagnostic agent enables to improve the labeling state to an antibody in comparison with the conventional nethod, and detect an antigen with high sensitivity by a high fluorescence intensity even in a solid state. Also provided is a diagnostic method using this diagnostic agent.

SINDA-8-10- 201955-0-30 SINDA-9-0-10 SINDA-9-0-10

diagnostic method RN 921934-98-7 CAPLUS

CN F-Alanine, N-[[4,7-bis(4-methoxyphenyl)], 2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

RN CN

921935-04-8 CAPLUS L-Serine, N-[[4,7-bis(4-methoxypbenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

921935-06-0 CAPLINS
L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-e]pyridin-6-yl]carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NOME)

Absolute stereochemistry.

RN 959396-50-0 CAPLUS
CN Alamine, N-[[4,7-bis/4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6yllcarbonyl]-3-sulfo-, 1-(2,5-dioxo-1-pyrrolidinyl) ester (CA NURK NAME)

IT 855/82-82-85 855781-84-9P 857/95-82-25 82(-935-87-65 92)835-93-79 82(-935-85-95 858(206-45-79

No. No. [Reactant]; SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent)
 (Incercent dye-bound diagnostic agent for labeling antibody, and diagnostic method)
 No. 85591-83-8 CAPUIG
 (1,2,5)Readia-look[3,4-c]cyridine-6-carboxylic acid,
 4,-bis(4-sethoxyphenyl)- (CA INDEX NOME)

855181-84-9 CAPLUS
[1,2,5]Oxadiacolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrolidinyl ester (CA INDEX NAME)

857048-00-1 CAPLUS
[1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



- RN 921934-97-6 CAPLUS
- β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]- (CA INDEX WAME)



921935-03-7 CAPLUS L-Serine, N-[[4,7-bis(4-nethoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

921935-05-9 CAPLUS

L-Alanine, N-[(4,7-bis(4-methoxyphenyl)(1,2,5)oxadiazolo(3,4-c)pyridin-6-yl)carbonyl)-L-seryl- (CA INDEX NAME)

959396-49-7 CAPLUS
Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiszolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INDEX NAME)

detection, and spray devices Isobe, Shinichiro

PATENT ASSIGNEE(S):

SOURCE:

CODEN: JKXXAF Patent

PATENT NO. KIND DATE APPLICATION NO.

L6 ANSWER 11 0F 31 CAPALIS COPTRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:167743 CAPALIS Fail-test
DOCUMENT NUMBER: 146:231129
TITLE: Marking agents containing orman Marking agents containing organic EL colorants, their

Japan Jpn. Kokai Tokkyo Koho, 41pp.

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. MIN. COUNT: 1 PATENT INFORMATION

20070215 JP 2005-377814 JP 2005-192046

924280-67-1 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid 4,7-bis(4-methylphenyl)-, propyl ester (CA INDEX NAME)



SP2266 (7-2)

RE: DCI (Reactant); RACI (Reactant or reagent)
(matting agents containing organic EL colorants, their detection, and spray
devices)
98886-53-5 CARUSS
(1,2,5)Datailos(1,4-c)pyridine-6-carboxylic acid,
4,7-mis(4-methylphenyl) - (CA INDEK MAME)



L6 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2007:141569 CAPLUS Foll-text DOCUMENT NUMBER: 147:271884

TITLE:

AUTHOR(S):

Fluorescent conjugates of casein and ovalbumin with A, "-diphenyl-1,2,5-oxadiazolo(3,4-e)pyridine-6-carboxylic acid: preparation and analysis Balasu, Mihaela Camelia; Popescu, Angela Department of Organic Chemistry, "Politehnica" CORPORATE SOURCE:

University of Bucharest, Bucharest, 060042, Rom SOURCE: Revue Roumaine de Chimie (2006), \$1(7-8), 847-850 CODEN: RRCHAX; ISSN: 0035-3930

PUBLISHER: Editura Academiei Romane DOCUMENT TYPE: Journal

FURLISHE: Beitura Academici Romane
DOCUMENT ITTE: Journal
DAMINIAGE:
Benjiah

MF Fluorescent conjugates are wisely used in biol, and medicine. The authors
used for this study hen ovalbumin and bovine casein. The conjugation reaction
of proteins with 4,1-diptenyl-1,2,5-mandistole[3,4-dippridin=6-carthopylic
acid (DCPG) use performed with dispolches/putchondininide (DCI) and N(hydroxy)maleinide (DRM). Fluorescent conjugates were separated by gelchromatog, and organic solvent precipitation. Purified fluorescent conjugates
were subsequently analyzed by fluorinetry and by sodium dockeyl sulfatepolyscrylamide gel electrophoresis (DGE-DRG). These analyzes selected that the
tested conjugation reaction yielded fluorescent conjugates at thiol groups.
The strongest emission was obtained with the ovalbumin conjugates. The limits
of detection by electrophoresis in presence of detergent for both protein
conjugates are also reported as the conjugates are also reported as are also reported.

MF NTL (Ramiyrely: SEO (Biological study; moclassified); PMP (Properties);
SEN (Synthetic preparation); AMST (Maniytical study); PMP (Broperties);
SEN (Synthetic preparation); AMST (Maniytical study); PMP (Broperties);
SEN (Synthetic preparation); AMST (Maniytical study); SUD (Biological
study); PMP (Preparation)
(preparation of conjugates of casein and ovalbumin with
diphomyll, 2,5] confidence (3, 4-d)pyridine-6-carboxylic acid, 4, 3-diphenyl(CA)
DEER NOME:

[1,2,5] Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl- (CA NNDEX NOME)



II 85732-26-7
Ri. RCI [Reactant]; RMCI [Reactant or reagent] [respectation of conjugates of casein and ovalbumin with dipterpl[1, 2, 5] oradia rolo (3, 4-c) pyridirecarboxylic acid and study of their fluorescent properties and dIG-PMGS)
RM 85713-28-0 RMGMS

CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA



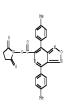
OTHER SOURCE(S): MARPAT 146:231129

- The marking agents contain solvents and 21 kinds of organic EU fluorescent colorants comprising 5-membered ring compds. having conjugated system and containing 21 kinds of hetero atoms, Se, or B. Objects are marked by spraying containing it makes of metero stons, as, or b. (opened are marked by spraying with the matring spents, and deposited marking spents are debeted by irradiating excitation light, thereby inducing light emission from the fluorescent colorants. Thus, an yellow-emitting marking agent contained MeOB and an activated ester of oxadiazologyzidize I. 5000(3-5-4-5)

NEC. IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(marking agents containing organic EL colorants, their detection, and spray devices) 982866-54-6 CAPLUS

[1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methylphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

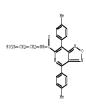


RL: IMF (Industrial manufacture); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)
(marking agents containing organic EL colorants, their detection, and spray

RN 908866-55-7 CAPLUS

CN Sthanesulfonic acid, 2-[[[4,7-bis(4-methylphenyl][1,2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]anino]- (CA INDEX NAME)



14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN

PRUS COPPRIGHT 2011 ACS on STN
2007:116994 APRUS Foll-text
146:180299
Development of organic electroluminescence dye
indicator for biomolecules
Isobe, Shinichiro

INVENTOR(S): PATENT ASSIGNEE(S):

Japan PCT Int. Appl., 94pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| И: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | ΒA, | BB, | BG, | BR, | ВИ, | BY, | Βž, | CA, | CE |
|------|-------------------|---|---|--|--|--|--|--|--|---|---|---|--|--|--|--|
| | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DΜ, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GE |
| | GE, | GH, | GM, | ΒN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KF |
| | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LI, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | M |
| | MW, | MX, | MZ, | NA, | NG, | NI, | NO, | NΣ, | OM, | PG, | PΗ, | PL, | ΡI, | RO, | RS, | RU |
| | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | IJ, | ΙM, | IN, | IR, | Π, | Τž, | UA, | UG |
| | US, | UZ, | VC, | VN, | ZA, | 2M, | ZW | | | | | | | | | |
| RW: | ΑĪ, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | PI, | FR, | GB, | GR, | HU, | IE |
| | IS, | II, | LΓ, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | В |
| | CF, | CG, | CI, | CM, | GA, | ŒΝ, | GQ, | G₩, | ML, | MR, | NE, | SN, | \mathbb{TD}_r | ΙG, | ВИ, | GE |
| | GM, | KE, | LS, | МW, | MZ, | M, | SD, | SL, | S2, | ΤZ, | UG, | ZM, | 24, | AM, | λũ, | BY |
| | KG, | K2, | MD, | | | | | | | | | | | | | |
| 1932 | 888 | | | Al | | 2008 | 0618 | | EP 2 | 006- | 7819 | 18 | | 2 | 0060 | 728 |
| R: | ΑI, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | ΡI, | FR, | GB, | GR, | HU, | IE |
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| 2008 | CNOO | 461 | | Α | | 2008 | 0919 | | IN 2 | -800 | CN46 | 1 | | 2 | 0080 | 128 |
| | 2007
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W: AE,
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N: AE, AG, AL, AM, AT, AJ,
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ST, TI, LT, LD, LV, MY,
CF, CG, CT, CD, CH, CY,
CR, KE, LS, MM, ME, NJ,
MR, KJ, EB, BS, MR, MB, NJ,
MR, KJ, EB, BS, MR, MB, NJ,
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Nr. AE, AG, ML, AM, AT, MJ, AE, BB, BG, SR,
CM, CO, CR, CU, CC, EG, DK, LM, EG, EG, EG,
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RM, MM, MM, MM, NG, MI, NG, MI, TO, CM, CM, PG, PB,
SC, SD, SE, SG, SK, SL, SM, ST, TJ, TM, TM,
RM, AT, EB, BG, CH, CC, CL, DE, DM, EE, SF, FL,
LS, TI, LT, LU, LV, MW, LD, PH, PT, PD,
GM, KE, LS, MM, MM, MB, SD, SL, SL, TLZ, UG,
KE, KE, LS, MM, MM, MS, SD, SL, SL, TLZ, UG,
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KE, EB, BG, CH, CC, CL, DE, DK, EE, ES, FL,
LS, TL, LL, LT, LU, LV, MW, ME, RE, PF, PR,
LS, TL, LL, LT, LU, LV, MW, RM, PM, PM, PM, PM,
LS, TL, LL, LT, LU, LV, MW, MB, PM, PM, PM, PM, PM, PM, PM, PM, PM, PM | 2001013601 A1 20010201 W0 2006-JP315008 Nr. AE, AG, AL, AM, AM, AM, AL, BA, BE, BG, BR, BM, CM, CO, CR, CU, CL, GE, JM, PM, IZE, EE, BE, BG, EE, GH, GM, RE, BH, DH, DH, JM, JM, SL, SP, ER, EL, LA, LC, LE, LE, LS, LT, JU, JW, LY, NA, MR, KM, AM, NA, MM, JM, DM, AM, CM, EP, EP, H, SC, SD, SE, SG, SK, SL, GM, ST, JJ, TM, TM, TE, GR, TH, EE, BG, CH, CC, CL, BE, DK, EE, ES, FT, FP, IS, TI, LT, LD, LW, M, JM, PM, PM, PM, PM, SR, SA, CM, KE, LS, MM, MM, NB, SD, SI, SE, TZ, UG, JM, SE, AT, BE, BG, CH, CC, CL, BE, DK, EE, ES, FT, FP, ST, TM, EB, BG, CH, CL, CL, BE, DK, EE, SF, FF, FP, ST, ST, TL, LT, LT, LD, LW, MB, SD, SI, SE, TZ, UG, JM, SE, MA, BB, BG, CH, CL, CL, BE, DK, EE, SF, FF, FP, ST, ST, TL, LT, LD, LW, MB, SD, SI, SE, TF, FP, ST, ST, TL, LT, LT, LD, LW, MB, EP, EF, EF, FF, ST, TT, LT, LT, LD, LW, MB, EP, EF, EF, FF, ST, TT, LT, LT, LD, LW, ME, PE, PE, FR, SE, ST, TT, LT, LT, LD, LW, MB, EP, EF, EF, FF, FP, ST, TT, LT, LT, LD, LW, MB, EP, EF, EF, FF, ST, TT, LT, LT, LD, LW, MB, EP, EF, EF, EF, FF, ST, TT, LT, LT, LD, LW, MB, EP, EF, EF, EF, ST, TT, EL, LT, LD, LW, MB, EP, EF, EF, EF, ST, TT, EL, LT, LD, LW, WB, EP, EF, EF, EF, ST, TT, EL, LT, LD, LW, WB, EP, EF, EF, ST, TT, ER, LT, LD, LW, WB, EP, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EP, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EP, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EP, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EP, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EF, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EF, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EF, EF, EF, ST, TT, ER, ST, TH, ER, ST, TH, ER, EF, EF, ST, TT, ER, ST, TH, ER, ST, TH, ER, EF, EF, ST, TT, ER, ST, TH, ER, LT, LD, LW, WB, EF, EF, ST, TT, ER, ST, TH, ER, TH, ER, ST, TH, ER, | 2001013601 A1 20010201 W0 2006—JP315008 W1 A2, Mc, ML, MM, AT, MJ, AT, S, BA, BB, BG, SR, BM, BT, CM, CO, CR, CD, CT, CB, DK, DM, DE, BG, SR, BM, BT, CM, CO, CR, CD, CT, CB, DK, DM, DE, BG, ED, CB, SR, ER, ER, LA, LC, LK, LR, LS, LT, LD, LY, LY, MA, MD, ML, MM, MA, MM, AN, MA, DM, DM, DM, CM, GM, FD, FP, HP, TS, CS, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, CS, CD, VE, VM, DA, DM, CM, CM, CM, CP, CM, CT, CT, CM, CM, CM, CM, CM, CM, CM, CM, CM, CM | 2007013601 Al 20070201 MG 2006-JP215008 2 Nr AE, AG, ML, AM, AT, MJ, AE, BB, BG, SR, BM, BY, SL, CM, CO, CR, CU, CL, EG, DK, LM, EG, EG, ES, CH, SH, SH, SH, SH, SH, SH, SH, SH, SH, S | 2001013601 A1 20010201 M0 2006-1P315008 200601 Nr. AE, AG, AL, AM, AI, AJ, AL, EA, BE, BG, BR, SM, BT, BE, CR, CM, CO, CR, CU, CL, GE, JM, PM, IZE, EE, BE, BG, ES, FI, ER, EE, GR, GH, MR, BE, MJ, DI, TI, NJ, IS, JP, FE, NS, MM, NS, HR, SE, LA, CC, LE, CE, LS, LT, JU, JV, LY, NA, HD, MG, MF, MK, MK, MA, NA, NA, NA, NI, NA, OR, PC, PB, HR, PT, PR, OR, SC, SO, SE, SG, SK, SL, SM, ST, JJ, TM, TM, TR, TT, TI, CM, CM, YE, CR, CC, CL, CL, EB, DK, EE, ES, FI, FR, GB, GR, BJ, IS, TI, LT, LU, LV, MR, SD, SI, SE, TI, CD, TM, SA, CM, KE, LS, MM, ML, NS, OS, SI, SE, TI, CD, TM, SA, MG, KI, MD, BU, JJ, TM 1932888 A1 20080518 EP 2006-181918 20060 Rr. AT, BE, BG, CR, CL, CL, BE, DK, EE, ES, FF, FR, GB, GB, GB, RR. AT, BE, BG, CR, CC, CL, CL, BC, DK, EE, FF, FR, GB, GB, GB, SR, AT, BE, BG, CR, CL, CL, BE, DK, EE, FF, FR, GB, GB, GB, SR, AT, BE, BG, CR, CL, CL, BE, DK, EE, SF, FF, FR, GB, GS, ST, ST, TI, LT, LU, LV, W, NR, NR, PE, PF, FR, FR, SE, SF, SK, TR, ST, TI, LT, LU, LV, W, NR, NR, PE, PF, FR, FR, SE, SF, SK, TR, ST, TI, LT, LU, LV, W, NR, NR, PE, PF, FR, FR, SE, SF, SK, TR, ST, TI, LT, LU, LV, W, NR, NR, PE, PF, FR, FR, SE, SF, SK, TR |

L, PL, PL, ...

112 2008-70461

K2 2008-704668

CM 2006-80035218

20080324

JP 2005-219218

A 20050728

T115008

W 20060728 IN 2008CN00461 KR 2008038183 CN 101273096 PRIORITY APPLN. INFO.: 20080924

OTHER SOURCE(S): MARPAT 146:180299



- Anole electroluminescence dye indicators having spacer regions for mucleic acids and proteins have been developed. The EL dyes have general structures I (EL, M. = B, halo, alry, alkewyl, alkewyl, SC, OS, sulfonyl, arcmatic, heterocyclic, PZ, R3 = R1, thinghene, furan, pyrrole, inidanale, omanole, thiatole, pyranoles, pyridines, sulfonyl sayla, X = N, S, O, Ss, B without) substitution; Y = CR, N, Mar?; F = alkyl, alkyaryl; An = Cl., Br., Ir., CRSO, SR, PS-C. TRE digest addit). comprise a spacer region CCRSP-J-C(GRS''1]—(R = RECO), CORB, COO, SONR, NGC (MH)RI, O, S, NG, CHCH, CCRS')—(R = CR), CO-A-HR, F = Alsyl, F *, F * I = alkyl without aromatic rings and they can contain sulfonyl, OS, quaternary amines, COR; Ar = aryl; O, q = 0 agent 20; p = q 1), anion caid, or perties (such as perties containing cysteic acid, 2-anion-3-sulfosulfaryl proponoic acid, 2-anion-3-sulfosulfaryl proponoic acid, 2-anion-3-sulfosulfaryl reponoic acid, 2-anion-3-sulfosulfaryl reponoics, acid, 2-anion-3-sulfosulfaryl reponoics, acid, 3-anion-3-sulfosulfaryl reponoics, acid, 3-anion-3-sulfosulfaryl reponoics, acid, 3-anion-3-sulfosulfaryl reponoics, proteins decided in specific indicators are acid, acid, anion-3-sulfosulfaryl reponoics, proteins incells involved in specific indicator or terminators, RM nol. beacon, proteins incells involved in specific indicator or terminators, RM nol. beacon, proteins and acid, demonstrated. 921555-06-00
 - 27555-05-05
 Rt. NG (Rashjical reagent use); SPM (Synthetic preparation); NMST
 (Rashjical study); PREP (Preparation); DSSS (Uses)
 [as gaser; development of organic electroluminescence dye indicator for binomis;
 25135-68-0 CMPLUS
 L-Mainte, NH (-4, T-bins (4-methoxyphenyl) [1,2,5] oxadiazolo [3,4-c]pyridin-6-yi]carbonyl]-1-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA HOREY NOME)

Absolute stereochemistry.

- II 360,915-05-99 921935-07-1F
- II 200325-06-39 SIRAS-07-35
 Bis RCI Reschart; SPR (Synthetic preparation); PREP (Preparation); RACI
 (Reactant or reagent)
 (as spacer; development of organic electroluminescence dye indicator for biomols.)
 PN 921395-05-9 CAPRUS

CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INDEX NAME)

Absolute stereochemistry.

- 921935-07-1 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride,
 4,7-bis(4-methoxyphenyl)- (CA NDEX NAME)



- IT 9219%-02-05 90(935-04-29 9219%-03-35

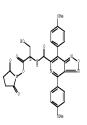
 Bit ABG (Bnalytical reagent use); SBR (Synthetic preparation); AMST (bnalytical study); PBPG (Preparation); SBSS (Uses) (development of organic electroluminescence dye indicator for biomols.)

 BM 92193-02-6 CARDUS

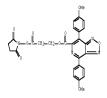
 L-Alainine, H-(4,7-bis/4-methoxyphenyl|[1,2,5]oxadiazolo[3,4-c]pyridin-5-yl]carbonyl]-3-sulfo-, 2,5-dioso-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN 921935-04-8 CAPLUS
 CN L-Serine, N=[[4,7-bis(4-methoxyphenyl)(1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INNEX NAME)



- CN [1,2,5] Oxadiazolo[3,4-c] pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, 3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl ester (CA INDEX NAME)



- II 66512-65-69 25548-65-69 85062-00-19
 20156-39-69 56229-88-15 -20155-21-59
 51236-29-79 50255-61-59
 RLs RIT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT No. No. 1 (Meactant) and (Symthetic preparation); MMSP (Preparation); MMSI (Meactant) or respent) (development of organic electroluminescence dye indicator for biomols.) MSI 85578-83-8 CAPAUS
 CN [1,2,5] Mandaiasolo [3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CR NDEX (MMS)

- 855781-84-9 CAPUUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrolidinyl ester (CA INDEX NAME)

- 857048-00-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

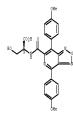
- 921934-97-6 CAPLUS

- RN 921934-98-7 CAPLUS
- [-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)

- RN 921935-01-5 CAPLUS
 CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl)-3-sulfo- (CA INDEX NAME)

- RM 921935-03-7 CAPLUS
 CN L-Serine, N=[[4,7-bis(4-methoxyphenyl)(1,2,5]oxadiazolo[3,4-c]pyridin-6yl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.



921935-08-2 CAPLUS
[1, 2, 5] Oxadiazolo [3, 4-c] pyridine-6-carboxylic acid,
4, 7-bis(4-methoxyphenyl)-, 2-carboxyethyl ester (CA INDEX NAME)

GS.CITING REF COUNT:

1 THERE ARE 1 CAPLUS RECORDS TRAIT CITE THIS RECORD
(1 CITINGS)

PREFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 31 CAPLUS COPYRIGHI 2011 ACS on STN ACCESSION NUMBER: 2007:53499 CAPLUS Full-text DOCUMENT NUMBER: 146:138245

Cell staining method using intercalator fluorescent

...og method using :

io

John Konkai Tokkyo Koho, 33pp.

OOOBH: JIRIGAF

DOOMBHI TYPE: Patent
LANGBAG: Japaneae

FAMILY ACC. MUM. COUNT: 1

PAIRNI INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

PRIBLY NO. RIND DATE APPLICATION NO. DATE

JP 2007-096788 A 2007018 JP 2005-192066 20055630

RECORD TAPPUN. INFO: JP 2005-192066 20055630

Record staining method is provided, which enables a fluorescence measurement even with a microroganism test sample in a dry state. The method comprises using as a fluorescent dye an interculator to be used for detecting a double-stranded DNB, which possesses a binding part for binding with a double-stranded DNB, and at least one coloring part consisting of an organic L (electroluminescent) dye and bound with the binding part through a connection part to stain microorganism in a test sample, and measure fluorescence of the microorganism.

microorganism. II 255/96-05-09 880134-74-75 230134-75-89 896/087-93-15

SNAS-3-9-15

Min AMD (Analytical reagent use); SPM (Synthetic preparation); AMST (Analytical study); PREP (Preparation); USES (Uses)

(cell staining method using intercalator floorescent dye)

Min SS108-45-0 CAPRUS

(I 1, 2, 3) Shandinatolo (3, 4-c) pyridine-6-carboxanido,

M.W - (3, 1 outherhoremetic) phin interchylene (oxy-2, 1-ethanediyl)] bis[4,7-bis(4-methoxyphenyl) - (CA IDDER NAME)

PAGE 1-A

PAGE 3-A

PAGE 2-A

RN 880134-74-7 CAPLUS

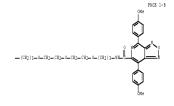
(N (1,2,5)Deathsalo(3,4-c)pyridin-6-carboxanide,

h-3-(-2,2-3)=7-(-2-3)=7-(-2-3)=8-(-2-3)=8-(-2-3)=9-(-2-3

CM 1

CRN 880134-73-6 CMF C54 H61 N7 O14

PAGE 1-A



CM 2

CRN 76-05-1 CMF C2 H F3 O2

880134-75-8 CAPUNS [1,2,5]Ossdiarolo[3,4-c]pyridine-6-carboxamide, NN'-[1,3,5,6]-tetrapydro-1,3,6,6-tetrapydro-1,3,6,7-tetrapydro-1,2-ridiphiss[3,7-propasediyopy-2,1-tethanediyolowy-2,1-ethanediyolowy-3,1-propanediyoly-1]bis[4,7-bis(4-methoxypbeny4)- [CA INDEX NAME]

H- (CH2)3-0-CH2-CH2-0-CH2-CH2-0-(CH2)3----

PAGE 1-B

PAGE 1-A

PAGE 1-C



RN 896447-93-1 CAPLUS
CN [1,2,5]Okadiasolo[3,4-c]pyridine-6-carboxanide,
4,7-mis(4-methoxyphenyl)-W-[2-[(10-[(2-methylamino|ethoxy]methyl]-9-anthracenyl]methoxy]ethyl]-, 2,2,2-trifluoroacetate (1:1] (CA INDEX NOME)

CM 1

CRN 896447-92-0 CMF C41 H39 N5 O6

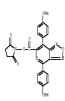
PAGE 1-A

PAGE 2-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

25574.20-5 RE: BCT (Reactant); RBCT (Reactant or reagent) (cell staining method using intercalator fluorescent dye) 853781-28-9 CRPUS [1,2,5]Oadmisto(5,4-c)pyridine-6-carboxylic acid, 4,7-his(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INIEK NAME)



L6 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2011 ACS on SIN

2006:913730 CAPLUS Fill-text 145:309967 Protein detection method using fluorescent dye ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

INVENTOR(S): Isobe, Shinichiro; Waki, Michinori

PATENT ASSIGNEE(S): SOURCE:

Japan Jpn. Kokai Tokkyo Koho, 36pp. CODEN: JKKKAF

DOCUMENT TYPE: Patent

LANGUAGE: J FAMILY ACC. NUM. COUNT: 1

| PAI | ENI | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|-----|------|------|-----|-----|-----|-----|------|------|-----|------|------|------|------|-----|-----|-------|-----|
| | | | | | | - | | | | | | | | | - | | |
| JP | 2006 | 2347 | 72 | | A | | 2006 | 0907 | | JP 2 | 005- | 5379 | 8 | | 2 | 0050. | 228 |
| WO | 2008 | 0181 | 29 | | Al | | 2008 | 0214 | | HO 2 | 006- | JP31 | 5751 | | 2 | 0060 | 809 |
| | ₩: | ΑE, | MG, | AL, | AM, | AT, | AU, | AΣ, | BA, | BB, | BG, | BR, | BW, | BY, | BΣ, | CA, | CH |
| | | CN, | 00, | CR, | CU, | C2, | DE, | DK, | DM, | DΣ, | EC, | EE, | EG, | ES, | FI, | GB, | GE |
| | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | Ю, | KN, | KF |
| | | KR, | KΣ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | М |
| | | MW, | MX, | MZ, | NA, | NG, | NI, | NO, | NΣ, | OM, | PG, | PH, | PL, | Pī, | RO, | RS, | RL |
| | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | IJ, | TM, | IN, | IR, | II, | TΣ, | UA, | U |
| | | US, | UΣ, | VC, | WN, | ZA, | ZM, | 214 | | | | | | | | | |
| | RW: | λī, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE |
| | | IS, | II, | LT, | LU, | LV, | MC, | NL, | PL, | PĪ, | RO, | SE, | SI, | SK, | TR, | BF, | В |

CF, CG, CL, CM, GA, GM, GG, GM, MM, MP, NE, SM, TD, TG, BM, GR, GM, NE, LS, NM, MC, NR, SD, SL, SC, TL, UG, DM, GM, AX, BF, NG, EL, ND, SU, JT, MM

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PRIORITY APPEAL, NDO: 14, MM

PRIORITY APPEAL, NDO: 14, MM

PRIORITY APPEAL, NDO: 15, MM

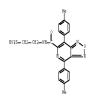
Sensitivity protein detection method is provided, which enables to perform a high sensitivity protein detection with a commented operation. In this protein detection method, a protein by measuring fluorescence hased on a second fluorescence wavelength observed in a state where the fluorescence dye is bound to the protein, which is shorter than a first fluorescence wavelength observed in a state where the fluorescence wavelen

method. II 902866-55-79

II NV.com.):...9

Mr. MAD (Benlytical respect use); SRM (Synthetic preparation); NMST (Benlytical study); PRSD (Preparation); USSS (Bess) [protein detection method using [Lucescent dye]
MR 9866-55-7 CAPUS

Bhanesulfoin caid, 2-[[[4,7-bis/4-methylphenyl] [1,2,5] coadianole[3,4-c]pyridin-6-yl] carbonyl amino]- (CA INDEX NAME)



300897-53-5 Ris RCT (Reschant); BACT (Reschant or reagent) (protein detection method using fluorescent dye) 908865-35-5 CAPAUS (1,2,5)Cantacol(3,4-e)pyridine-6-carboxylic acid, 4,7-bis(4-methylphemyl)- (CA INDEX NAME)

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI No. NC. (Meactant): SAM (Synthetic preparation): PMSP (Preparation): NACI (Deactant or respect) (protein detection method using fluorescent dye) 90866-54-6 (ARLOS (1,5)Okadisolo[3,4-c]pyridine-6-catboxylic acid, 4,7-bis(4-methylphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INGEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

L6 ANGEMER 16 OF 31 CAPLUS COPPRIGHT 2011 ACS on STM
ACCESSION NUMBER: 2006:679269 CAPLUS <u>Full-text</u>
DOCUMENT NUMBER: 14:57925
ITHE: Development of fluoreacent dsDMA-intercalating

reagents for the application to gene detection Isobe, Shinichiro

INVENTOR(S):

PATENT ASSIGNEE(S): Japan Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: J FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION

SOURCE:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|------|----------|-----------------|---|----------|
| | | | | | |
| JP 2006180835 | λ | 20060713 | JP 2004-380646 | | 2004122 |
| US 20080101176 | Al | 20080501 | US 2007-794228 | | 20070620 |
| PRIORITY APPLN. INFO.: | | | JP 2004-380646 | A | 2004122 |
| | | | WO 2005-JP19292 | W | 20051020 |
| | | | | | |

NETTY PAPMA. 1970:

JP 2004-38666 A 20041289

WE 2005-197929 W 20051030

IGMENT MISTORY FOR US PAYMAN AVAILABLE IN LISUS DISPLAY FORMAT

Word Illustracent didRM-intercalating reagents based on organic RL dye for the application to gene detection have been developed. The intercalating reagent season organic RL dye for the application of the intercalating reagent season organic RL dye for the application of the intercalating says the the intercalating reagent season organic RL dyes have been developed for the application of the intercalating says to gene detection. Sample doUR solution is mixed with the solution containing the intercalating reagent and the reaction mixts, are spotted on the assay media substrate for contenting the Flourescent intensities. The organic EU dyes have condensed ring structures consisted of 5- (containing better atoms such as Se or S, assless or initiationles) or Semberder dirag containing conjugated double bonds. The binding regions of the dyes are single or multi arosatic rings such as anthracene, phenathrees, pyrear, flourees, higherophene, naphthalmed (clinides and inides) or phenyldinining groups. A naphthalene dirinde intercalater and an anthracene intercalater was expressed as URD-intercalating reagents were studied. Peptidic intercalater containing the organic EU dyes was also prepared. Per SEC 1984-18-06. SEC 1984-18-

application to gene detection) 855781-85-0 CAPLUS

[1,2,5] Oxadia zolo [3,4-c] pyridine-6-carboxanide,
N,N'=[9,10-anthracemediylbis [methylene (oxy-2,1-ethanediyl)]] bis [4,7-bis (4-methoxyphenyl)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

PAGE 3-A

 $\label{eq:continuous} \begin{array}{lll} 89641-86-2 & \text{CAPLUS} \\ [1,2,5] \text{Onadiarolo} \left(3,4-c\right) \text{pyridine-4-carboxamide}, \\ N,N^+\left[1,3,6,6+\text{tetrahydro-1},3,6,8+\text{tetrahodeno},0\,\text{Im}\right] \left[3,4\right] \text{phenanthrolin-2-7-dialy} \left[13,4\right] \text{phenanthrolin-2-7-dialy} \left[13,4\right] \text{propagate} \left[13,4\right] \text{propagate} \left[13,4\right] \text{propagate} \left[13,4\right] \text{propagate} \left[13,4\right] \text{phis} \left(4-\text{methoxydenyl}\right) - \left(9C1\right) & \left(2A\text{ INDEX NAME}\right) \end{array}$

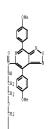
PAGE 1-A

PAGE 1-R

PAGE 1-C

896447-93-1 CAPLUS [1,2,5] Showaisarolo(3,4-c)pyridine-6-carboxamide, [4,7-bis(4-max)oxphenyl)-8-[2-[(10-([2-(methylamino)ethoxy]methyl)-9-anthracenyl]methoxy]ethyl]-, 2,2,2-trifluoroacetate [1:1] (CA INDEX NOME)

CRN 896447-92-0 CMF C41 H39 N5 O6



PAGE 2-A

PAGE 1-A

CRN 76-05-1 CMF C2 H F3 O2

II 955781-83-8

SSCN2 vol. 2

SSCN2 vol. 2

RE SDT (Rescant); PACT (Reactant or reagent) (development of fluoroscent diff0-intercalating reagents for application to gene detection)

SSSN2-3-2 CAPRUS

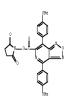
(1, 2,5)Comains(0, 4-e)Pyridin-6-carboxylic acid,
4,7-mis(4-methoxymbenyl)- (CA INDEX (MME)

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI

(Reactant or reagent) (development of fluorescent dsDNA-intercalating reagents for

application to gene detection) 855781-84-9 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



OS.CITING REP COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L6 ANSWER 17 OF 31 CAPPLUS COPTRIGHT 2011 ACS on STN
ACCESSION MOMBER: 2006:503242 CAPPLUS <u>Fuil-text</u>
DOCUMENT MANSER: 1467:76997
ITILE: The effect of 4,7-diphenyl-1,2,5-oxadiazolo(3,4-

AUTHOR(S):

clpyridine-6-carboxylic acid on protein tyrosine phosphatase-sl activity Balasu, Mihaela Camelia; Costea, Ion; Popescu, Angela

Balasu, Mihaela Camelia; Costea, Ion; Pepeson, Ange Department of Organic Chemistry, Politahnica" University, Bocharest, 660042, Rom. Revue Romaine de Chimie (2006), Volume Date 2005, 50(9-10), 851-80 COMEN: ROMAN; ISSN: 0035-3930 Editura Academiei Romane CORPORATE SOURCE: SOURCE:

PUBLI SHER:

DOCUMENT TYPE: LANGUAGE:

MBMI TIPE: Journal
UMAGE: English
Protein tyrosine phosphatases (PTP) are regulatory proteins that play an
important role in cell signaling processes. They exect their regulatory
action in conjunction with protein tyrosine kinases keeping under store
control the phosphorylation level of specific signaling proteins. PTP-SL (PTP
STEP likel has an major role in the activity modulation and translocation of
extracellular signal regulated kinase (BER2). The interaction between PTP-SL
and BER2 involves kinase interaction notif (RTM) situated at the N-terminus of
the PTP-SL catalytic domain. We report here the results of our study
concerning the inhibitory effect of 4, "diphenyl-1,2,"-omanianolo[3,4"
clypridine—6-carboylic acid (DOM) on PTP-SL stutyty. To this purpose
three PTP-SL forms were empressed and purified. Using p-nitrophenylphosphate
(DNPP) as subtracte, the PTP-SL forms stimpled decreased activities. (pNPP) as substrate, the PTP-SL forms displayed decreased activities to increased concns. of DOPCA in the range 5-200 μM.

36/34-78-4 Ri. SSU (Biological study, unclassified); BIOG (Biological study) (DORCH; effect of 4,1-di-Ph-1,2,5-oxadia:olo(2,4-c)pyridine-6-carboxylic acid on protein tyrosine phosphatase-sl activity) 83731-38-1 (DRUMS 10.5) (Control of the carboxylic acid of the carboxylic acid of the carboxylic acid of 1.7-diphenol.

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA INDEX NAME



13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L6 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:269311 CAPLUS Full-text

DOCUMENT NUMBER: 144:325826 TITLE:

144:152606

Development of double stranded DNA intercalating organic electroluminescence probe for gene detect assay [Looke, Shinichiro Japan PCT Int. Appl., 52 pp. COURN: PIRRIM PARENT Japanese

TIMZENTOR (S)

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE: Ja FAMILY ACC. NUM. COUNT: 1 Japanese

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 2006030788 A 200603032 W C 2005-7016847 20050913 W: AE, MG, ML, MM, AT, MJ, AL, BA, BB, BS, BW, BW, BW, BJ, CK, CK, CW, CO, CR, CU, CC, BE, BK, MJ, ED, ER, BB, BS, FT, BK, CG, GE, GE, GH, BH, BH, DT, DT, LT, MJ, LS, DP, ER, BB, MJ, BW, MJ, MJ, MJ, LX, LC, LK, LR, LS, LT, LU, LV, MA, MC, MS, MK, MM, MK, MI, MJ, MA, NO 2006030788

(Analytical study); PREP (Preparation); USES (Uses) (development of double stranded DNA intercalating organic electroluminescence probe for gene detection assay

electroluminescence probe for gene detection assay! 80013-18-7 (APLMS | CAPLMS | CA

PAGE 1-A

CRN 880134-73-6 CMF C54 H61 N7 O14

__ (CH₂)3_0_CH₂_CH₂_O_CH₂_O_CH₂_O_(CH₂)3_NH

CM 2

RN 880134-75-8 CAPLUS

CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxamide,

N.W.=[(1,36,6-tetrahydro-1,5,6-tetrahydro-1,5,6-tetrahydro-1,5,6-tetrahydro-1,5-t

- (CH2)3-0-CH2-CH2-0-CH2-CH2-0-(CH2)3-

PAGE 1-B

PAGE 1-A

CH2)3_0_CH2_CH2_O_CH2_CH2_O_|CH2)3_NH_

PAGE 1-C



H2W_(CH2)3_0_CH2_CH2_O_CH2_CH2_CH2_0_(CH2)5

coulus-10-7 Chrono
[1,2,5]Oxadiaco[0,3,4-c]pyridine-6-carboxanide,
N,N'-[9,10-anthracenediylhis(methyleneoxy-2,1-ethanediyl]bis[4,7-his(4-methoxyphenyl)-N-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 880134-78-1 CAPLUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxanide, (1, 2, 3) oxamization (3,4-c) pyrinthe-0-carboxanice, 4,7-bis(4-methoxyphenyl)-N-methyl-N-[2-[[10-[[2-(methylamino|ethoxy]methyl)-9-anthracenyl]methox 2,2,2-trifluoroacetate (1:1| (CA INDEX NAME) oxvlethvll-.

J_{He}

CRN 880134-77-0 CMF C42 H41 N5 06

PAGE 3-A

PAGE 1-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

II 255 No.-20-NO
R: BCI (Reactant); SBN (Synthetic preparation); PREP (Preparation); RBCI
(Reactant or reagent)
(development of double stranded UNA intercalating organic
electroluminescence probe for gene detection assay)
R 255781-49-7 (APUIS
CN (1,2,5)Chandisolo(2,4-c)pyridine-fo-carboxylic acid,
1.7 intercharmograph 1,5 disconfusional content (APUIS) NAMED

4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

REFERENCE COUNT:

(3 CITINGS)
23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN ARAUS COPERIGHT 2011 ACS on STN
2005:1026011 CAPRUS Fell-tear
143:335472
Organic conlinear optical naterial
Mataga, Sunutaco; Thiesana, Thies Itahii, Isutom;
Eato, Shinichiro; Gormaru, Hiddei; Shigeiwa,
Morjywii; Macda, Sminichi
Mitamishii Chemical Corp., Japan
Jon. Rokal Tokkyo Moho, 28 pp.
COSEN: JOUGNE
Dataset ACCESSION NUMBER: DOCUMENT NUMBER:

PATENT ASSIGNEE(S):

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 2005258388 JP 4501588 JP 2004-239729 20040819

PRIORITY APPLN. INFO.: JP 2003-404725 JP 2004-32223 MARPAT 143:335872 relates to --A 20040209

OTHER SOURCE(S):

on nounce, α): Markeni 143:3308 [Z]
The invention relates to an organic nonlinear optical material, characterized by a large two-photon absorption cross section, and a large Stokes shift, and represented by $(Rc^2)n-Rt-(Rc^2)n$ [Rt] = divalent heterocyclic group; Rc^2 and Rc^2 = beterocyclics and aromatic hydrocarbons; and n and n = 1-4 integers). $955(n-2^{-1})^2$

RL: PNU (Preparation, unclassified); SPN (Synthetic preparation); PREP

(Preparation)
(organic modilers optical material)
865(91-72-1 CAPUE)
865(91-72-1 CAPUE)
4,7-bis([1,1'-biphenyl]-4-yl)-, ethyl ester (CR INDEX NAME)

ANSWER 20 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN ESSION NUMBER: 2005:589313 CAPLUS Foli-text UMENI NUMBER: 143:93575 L6 ANSWER 20 OF ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE: Method for detecting biomolecule using labeling dye or

INVENTOR (S)

Method for detecting biomolecule using label labeling kit Labeling kit Label, Shinichiro Mataka, Shuntaro, Japan; Takenaka, Shigeori PCT Int. Appl., 67 pp. COORN: PIXXIO Patent PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: IOCOMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATEN | п | 10. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|-------|-----|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|------|------|-----|
| | | | | | | - | | | | | | | | | - | | |
| WO 20 | 05 | 0620 | 16 | | Al | | 2005 | 0707 | | MO 2 | 084- | JP19 | 215 | | 2 | 0841 | 222 |
| li | i: | AΞ, | AG, | AL, | AM, | AΓ, | AU, | AΣ, | BA, | BB, | BG, | BR, | B₩, | BY, | BΣ, | CA, | CH |
| | | CN, | 00, | CR, | CU, | C2, | DE, | DK, | DM, | DΣ, | EC, | EE, | EG, | ES, | FI, | GB, | GD |
| | | GΕ, | GH, | GM, | HR, | HU, | ID, | Ц, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KΣ, | LC |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | М, | MX, | MΣ, | NA, | NI |
| | | NO, | NΣ, | OM, | PG, | PH, | PL, | ΡĪ, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY |
| | | IJ, | ΙM, | TN, | IR, | IΓ, | ΤŽ, | UA, | UG, | US, | UZ, | VC, | W, | YU, | ZA, | ΣM, | 2W |
| F | % : | B₩, | GH, | GM, | KE, | LS, | М, | MΣ, | NA, | SD, | SL, | S2, | 12, | UG, | 214, | ΣW, | AM |
| | | ΑŹ, | BY, | KG, | ΚŹ, | MD, | RU, | IJ, | TM, | λI, | BΕ, | BG, | CH, | CY, | CZ, | DE, | DK |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IS, | II, | LT, | LU, | MC, | NL, | PL, | PI |

US 7015002 US 7015002 B2 20060321 PE 7172911 A1 20061018 PE AX, DE, FR, GB, II IN 20060002338 A 200701024 IN 20060002338 A 20070106 RE 2007003827 A 20070105 US 20070154890 A1 20070105 US 20070154890 B2 20100216 EP 2004-807572 20041222 CN 2004-80038772 IN 2006-CN2338 KR 2006-7014817 US 2006-584089 20041222 20060626 20060721 20060809 PRIORITY APPLN. INFO.: JP 2003-427268 A 20031224

JP 2004-105187 WO 2004-JP19215 A 20040331 W 20041222 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)



RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent)
(nethod for detecting biomol, using electroluminescent labeling dye)

(2,2,5)0xadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CA INDEX NOME)

857048-00-1 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(7 CITINGS)
20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 AMSWER 21 OF 31 CAPLUS COPTRIGHT 2011 ACS on STN ACCESSION NUMBER: 2005:589130 CAPLUS Full-text 143:86448 DOCUMENT NUMBER: TITLE: INVENTOR(S):

143:86448
Single-layer organic el device
Laobe, Shinichiro
Mataka, Shuntaro, Japan, Takenaka, Shigeori
PCT Int. Appl., 26 pp.
COMEN: PIXINIO
Patent PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Pa LANGUAGE: Ja FAMILY ACC. NUM. CGUNT: 1 PATENT INFORMATION: Japanese

WO 2005061657

PATENT NO. KIND DATE APPLICATION NO. DATE Al 20050707 WO 2004-JP19211

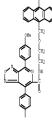
20041222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

803/81-80-U CAPUUS
[1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxanide,
N,N'-[9,10-anthracemediylbis[methylene(oxy-2,1-ethanediyl)]]his[4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



PAGE 3-A

[1,2,5] Oxadi azolo (3,4-c) pyridine-6-carboxamide,
N,N'-[(1,3,6,8-tetrahydro-1,3,6,8-tetraoxobenzo [lmn] [3,8] phenanthroline-

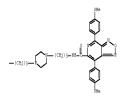
2,7-diyl) bis (3,1-propanediyl-4,1-piperazinediyl-3,1-propanediyl) bis [4,7-

bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



PAGE 1-B

PAGE 1-F



II 800050-80-9

RL: RCI (Reactant): RACI (Reactant or reagent)

(single-layer organic el device)
855781-83-8 CAPLUS
[1, 2, 5] Oxadiazolo (3, 4-c) pyridine-6-carboxylic acid,
4, 7-bis (4-nethoxypbenyl) - [CA INDEX UNE]

805/81-64-9P RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (single-layer organic el device) 855781-84-9 CAPLUS

[1, 2, 5] Oxadiazolo [3, 4-c] pyridine-6-carboxylic acid,

4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



REFERENCE COUNT:

SOURCE:

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 AMSWER 22 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER

DOCUMENT NUMBER:

2014-88310 CAPLUS Folit-test
142:280019
Synthesis and biological application of a new
1, 2, 5-oxadiazolo[3, 4-c]pyridine moiety fluorescent

marker Balasu, Mihaela C.; Costea, Ion; Fratila, Raluca; Popescu, Angela; Draghici, Constantin; Szedlacsek Stefan B. Department of Organic Chemistry, "Politehnica"

CORPORATE SOURCE:

University, Bucharest, 060042, Ron. Revue Roumaine de Chimie (2004), 49(3-4), 309-315 CODEN: RRCHAX; ISSN: 0035-3930

PUBLISHER: Editura Academiei Romane DOCUMENT TYPE: Journal LANGUAGE: English CASREACT 142:280019 OTHER SOURCE(S):

DR SOURCE(5): CASPACT 142:20019
The synthesis of nuccinainly leater of 4,7-diphenyl-1,2,5-oxadiazolo[3,4-d]pyridin-6-carboxylic acid (COPC) led to a new, floorscent, asin-specific reagent, in a good yield. The efficiency of DOPC-ster in protein labeling was evidenced using borine serun albumin (BGA) as a protein target. The labeled BGA than obtained is optimally entired within the near OF bandwidth, yields a bright green-yellow floorscence and possesses an unusually large Stokes shift. These characteristics qualify the DOPC-ster for various explications which involve floorescent labeling of proteins-including floorscence energy transfer (FGET| explication of proteins-including floorscence energy transfer (FGET| explication (BGA) (Silval-2-or, Bioconjugate with BGA)
RE: SOU (Biological study)

(Biological study) (synthesis and evaluation of a new 1,2,5-oxadiazolo[3,4-c]pyridine (synthesis and evaluation of a ne bioconjugate fluorescent marker) RN 85731-38-0 CRPLUS CN [1,2,5)0---

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA INDEX NAME)



NYD:51.5-CP
RN:SSU (Bloogical study, unclassified); PRP (Properties); RCT (Reactant); SRM (Synthetic preparation); BCG (Blooderical study); PREP (Properties); RCT (Reactant or reagent); gynthesis and evaluation of a new 1, 2,5-oxadiasolo[3,4-c]pyridine biocomjogate fluorescent marker; BCG (Synthesis and Synthesis and Synth

STRIL-2-0.
Will ST. (Reactant): RACT (Reactant or reapent)
(synthesis and evaluation of a new 1,2,5-oxadiazolo[3,4-c]pyridine hioconjugate fluorescent marker)
STRIL-3-0. (CAUSION 13):1-3-0. (CAUSION 13):1-3-0. (CAUSION 14):1-3-0.
(1,2,5) Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CAUSION 14):1-3-0.

INDEX NAME



287255-12-59 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (synthesis and evaluation of a new 1,2,5-oxadiazolo[3,4-c)pyridine

bioconjugate fluorescent marker) RN 847203-13-8 CAPLUS

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carbonyl chloride, 4,7-diphenyl- (CA NOBE NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 NUSSER 23 OF 31 CAPLUS COPPRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:204620 CAPLUS Full-test
DOUBLEN NUMBER: 141:424128
Product class 7: 1,2,5-oxadiazoles
Paton, R. M.
Department of Chemistry, University of Edinburgh,
Edinburgh, EBS 333, UK
SCURCE: Science of Synthesis (2004), 13, 185-218
COCEN. SSV179
DEBLISHER: General Themse Verlag

PUBLISHER: Georg Thiene Verlag DOCUMENT TYPE: Journal: General Review

DOCUMENT TYPE: Journal, General Review
LANGAGE: English
AB A review. Methods for preparing 1,2,5-omadiazoles are reviewed including
cyclisation, ring transformation, and substituent modification.
BE: SRM (Synthetic preparation); PREP (Preparation)
(preparation of conditiones win cyclisation, ring transformation, and
substituent modification)

NO 225785-71-0 CAPLOS
CM (1,2,5) Stondainzole (3,4-c) pyridine-6-carboxylic acid,
4,7-hais(4-chlorophenyl)-, cthyl ester (CA INDEK NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)
225 THERE ARE 225 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L6 ANSWER 24 OF 31 CAPLUS COPPRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2003:353897 CAPAUS Folitent
DOCHMENT NUMBER: 183:360197
ITTLS: Organic electroluminescent device
Wataga, Sunntaco; Thiemann, Thies; Soeda, Yasuhiko;
Kaneko, Shinichiro; Taksumani, Byuichi; Komatsu,
Takshiro; Sakamani, Mengil

Takahiro; Sakagami, Megumi

PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: J FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION A 20030509 JP 2003133072 PRIORITY APPLN. INFO.: JP 2001-327275 JP 2001-327275

MARPAT 138:360197 OTHER SOURCE(S):

The invention relates to a blue or white light-emitting organic electroluminescent device, suited for use in making a display device and a

back light, comprising an organic electroluminescent layer containing a compound represented by I or II [A and B = aromatic hydrocathon group; C and D = aromatic hydrocathon are betterocyclic groups; and T = carbon atom that may have a substituent]. SNIG2-4-6-6
RE BCI [Reactant]; SNI (Synthetic preparation); PREP (Preparation); RACI (Reactant or research)

(Reactant or reagent)

(in preparation of blue or white-emitting; organic electroluminescent

| device| | RN | 519182-44-6 | CAPFUS | CI | (1,2,5) Oxadiazolo (3,4-c) pyridine, 4,7-bis(4-bromophenyl)-6-phenyl- (CA | NUEX NUME) | CAPFUS | CAPF



ANSWER 25 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2002:70704 CAPLUS Full-text DOCUMENT NUMBER: 136:355194

TITLE: Preparation of

MITHOR(S)

Preparation of 4,7-dishetary1-1,2,5-omadiazolo[3,4-c]pyridines as red fluorescent naterials Gorobnaru, Hideki; Thiemann, Thies; Sawada, Jsuyoshi; Tashashi, Karuduri, Skishi-i, Katsuni; Ochi, Macko; Kosuqi, Yoshio; Mataka, Shuntaro Frandate School of Engineering Sciences, Kyushu University, Kasuqa, 816-8380, Japan Betzeroycles (2001; 5611-2), 241-31 COSSH: BRUYM; ISSN: 0385-5144 Jaman Institute of Meteropoulis (Demistry, Managaman Computer of Meteropoulis (Demistry, Managaman) CORPORATE SOURCE:

SOURCE:

Japan Institute of Heterocyclic Chemistry PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English CASREACT 136:355194 OTHER SOURCE(S):



1,2,5-Okadiazolo [3,4-c]pyridines (I; $\hbar x = some \ or \ all \ of \ 2-thienyl, \ 2-tranyl, \ 3-thienyl, \ 3-tenso [b]thienyl, \ 5-settyl-2-thienyl, \ 5-tenso -2-thienyl, \ 2,5-tonso -2-thienyl, \ 2$ (7), the Ph derivative (8), and the unsubstituted compound (10). Red EL light

(1), the Ph derivative (8), and the unaubitived compound (10). Red EL light at \(\lambda = 66\) mas orbitained in an GOED derive when RE 4. 7-bis (5-pheny)lthiem-2-yl-1, 2, 5-castainsole(3,4-c)pyridin-6-carboxylate was used as a dogant emitter. The crystal and mol. structures of 4, 7-bis (2-thiery)l-6-cyano-1, 2, 5-castainsole(3,4-c)pyridine were determined by x-ray crystallog.

SWM: 50-4, EMP1 4, 7-diphenyl-1, 2,5-castainsole(3,4-c)pyridine-6-carboxylate \(^{1}\) SSS\(^{1}\) SYS\(^{1}\). Signal (3,4-c)pyridine
RE: FRP (Properties)

(commarison: between's whethirthed oxadismologyridines as red

(comparison; heteroaryl-substituted oxadiazolopyridines as red fluorescent substances

76593-55-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INDEX NAME)



[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX



REFERENCE COUNT:

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (11 CITINAS)

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 AMSWER 26 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN 1999:241402 CAPLUS <u>Full-text</u> DOCUMENT NUMBER-131:6553

10-Hydroxy-7-arylindeno(1,2-b]-1,2,5-oxadiazolo(3,4-TITLE:

d]pyridines and [-ary]-10-oxoindeno[1,2-b]-1,2,5-oxadiazolo(3,4-d]pyridines - synthesis, spectra, and polymorphism Mataka, Shuntaro; Gorohmaru, Hideki; Thiemann, Thies;

Sawada, Tsuyoshi; Takahashi, Kazufuni; Tori-i,

Sawada, Isayashi, Tatahashi, Tatafuni; Tori-i, Raiyashi Inatitute of Advanced Material Study, Graduate School of Engineering Sciences, Bysabu University, Kasupa, 816-8500, Japan Heterocycles (1999), 50(2), 895-902 COMBH: HCTWN, ISSN: 0385-541 Japan Institute of Heterocyclic Chemistry CORPORATE SOURCE:

DOCUMENT TYPE:

LANGUAGE: English

AUTHOR(S):

7-Aryl-10-oxoindeno[1,2-b]-1,2,5-oxadiazolo[3,4-d]pyridine (A) and 7-aryl-10-P-Aryl-10-osoindeso(1,2-b)-1,2,5-ososiaso(0)3, 4-djpyridise (A) and 7-ryl-10-pridorsyindeso(1,2-b)-1,2,5-ososiaso(0)3, 4-djpyridise (B) dyes were prepared from scetophenore derivs. While A exhibit a dark red color, they are only weakly fluorescent. Opes B are more fluorescent. Of incherent is that 10-pridorsy-1-phenoly(1,3-b)-5-ososiaso(0)3, 4-djpyridine can take four polymorphic forms in the solid state, of which two are yellow and two are red. Wo of them are interconvertible (yellow/red) good exposure to different solvents. N-ray crystal structure anal. of one of the red forms shows the Ph rings and the indemonsialsolopy-violidise ring to be coplanar. NATYD-79-09, 4,7-Bis(p-chlorophenyl)-6-(ethoxycarbonyl)-1,2,5-coadiasol(3,4-c)pyridise 22:93-71-15. Ph. Bis(p-exhippenyl)-6-(ethoxycarbonyl)-1,2,5-coadiasol(3,4-c)pyridise R: EXI (Section); SEXI (

(intermediate; preparation, fluorescence and crystal polymorphism of indernooxadiazolopyridine dyes) 225795-70-0 CAPLUS

(Reactant or reagent)

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



225795-71-1 CAPLUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-his(4-methylphenyl)-, ethyl ester (CA INDEX NAME)

 $76593 - 55 - 0, \quad 4, \\ 7 - Diphenyl - 6 - (ethoxycarbonyl) - 1, \\ 2, \\ 5 - oxadiazolo[3, 4 - 1] - 1, \\ 2, \\ 5 - oxadiazolo[3, 4 - 1] - 1, \\ 4, \\ 7 - Diphenyl - 6 - (ethoxycarbonyl) - 1, \\ 2, \\ 5 - oxadiazolo[3, 4 - 1] - 1, \\ 5 - oxadiazolo[3, 4 - 1] - 1, \\ 6 - oxadiazolo[3, 4 - 1] - 1, \\ 7 - oxadiazolo[3, 4 - 1] -$

c)pyridine RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; preparation, fluorescence and crystal polymorphism of

indenooxadiazolopyridine dyes) 76593-55-0 CAPLUS

CN (1,2,5) Oxadiazolo(3,4-c) pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN

NAMES COMPAREM 2011 AGS on STM
1999:112546 CAPULS Fill-text
130:338265
Synthesis of 9-deoxycotylenol derivatives carrying a
fluorescent chromophore
Li, Fengy Eato, Nobno; Gorohmaru, Minési; Mataka,
Shuntaro; Mora, Akira; Takenhita, Mitoshi
Tohwa Institute for Orient Studies, Tohwa University, CORPORATE SOURCE:

Japan

Kyushu Daigaku Kino Busshitsu Kagaku Kenkyusho Hokoku SOURCE:

(1998), 12(2), 125-130 CODEN: KDBHFS; ISSN: 0914-3793

Kyushu Daigaku Kino Busshitsu Kagaku Kenkyusho PUBLISHER: DOCUMENT TYPE:

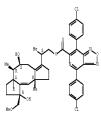
LANGUAGE:



The structure-activity relationships of cotylenol, a plast-growth regulating diterponid, 9-deoxycotylenol was found to retain the biol, activities. The synthesis of 9-deoxycotylenol derivs. carrying a floorescent chromophore from I were achieved to create new tools for tampeting 14-3-3 proteins which are the binding proteins of this class of mole, and recently were regulated to be the key regulatory proteins in the intracellular signal transductions. CMLVD-64-20 ENAMA-64-30 ENAMA-6 The structure-activity relationships of cotylenol, a plant-growth regulating

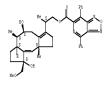
dimethyldicyclopenta[a,d]cycloocten-3-yl]propyl ester (CA INDEX NAME)

Absolute stereochemistry.



224.13-67-5 CAPAUS [1,2,5] Mondaisolo[3,4-c] pyridize-6-carboxylic acid, 4,7-diphenyl-, (5,1-2-(15,6,6),8,7,10,7),10-decahydro-5,3-dihydroxy-9-(asthoxymethyl-)-6,10-dinathyldicyclopenta[4,d] cyclooctan-3-yil]propyl acter (6, 1002; NMe)

Absolute stereochemistry.



224430-12-2 CAPLUS

Benaroic acid, 6-[[[4,7-bis(4-chlorophenyl][1,2,5]oxadis2olo[3,4-c]pyridin-6-yl]carboxyl]amio]-, [25)-2-[[55,68,68,58,98,108n]-1,2,4,5,6,6a,7,8,9,10a-diachyto-5,-diphthytory-5-lenbthytely]-5,10a-diachyto-5,-diphthytory-5-lenbthytely]-5,10a-diachyto-5,-diphthytory-5-lenbthytely]-5,10a-diachyto-5,-diphthytory-5-lenbthytely]-5,10a-diachyto-5,-diphthytory-5-lenbthytely]-5,10a-diachyto-5,-diphthytory-5-lenbthytely-15,10a-diachyto-5,10a-d

Absolute stereochemistry.

PAGE 2-A

\$5721-30-0 | 220039-72-3 RL: RCI (Reactant); RACI (Reactant or reagent)

(preparation of fluorescent chromophore derivs, of 9-deoxycotylenol) $85731-38-0\ \mbox{CAPLUS}$

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA INDEX NAME)

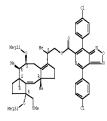
224430-73-3 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4.7-bis(4-chlorophenvl)- (CA INDEX NAME)



II 255420-85-24

2.5 x 2-6 d. S. 3-7
Ris RT (Reactant); SRN (Spithetic preparation); PREP (Preparation); PRCT (Reactant or reagent) (preparation of floorescent chromophore derives of 9-deoxyoxylenol) (24490-65-3 (OREUS) (principle-carboxylic scid, 4, 7-bis (4-chloreper))-, (25.9-2-(15.6, 8, 6.5, 8, 7, 10.8)).
1, 2, 4, 5, 6, 6, 7, 8, 9, 10s-decalystro-9-(nethoxymethyl)-6, 10s-dimethyl-1, 9-bis (4-chloreper)-1, (25.9-dimethyl-1)-1, (25.9-dimethyl-1

Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1991:546246 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: DOCUMENT NUMBER: 115:146246
ORIGINAL REFERENCE NO.: 115:24865a,24868a

TITLE:

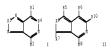
115:24655,24665a
Organic electroluminescent device
Tashiro, Masashi; Mataga, Shuntaro; Takahashi,
Kasufumi; Saito, Shogo; Isutsui, Tetsuo; Akachi,
Chihaya; Sato, Toshiharu; Meda, Shuichi
Mitamishiki Kasei Corp., Japan
Bur. Pat. Appl., 37 pp.
CORDN: EPRIM
Patent INVENTOR (S):

PATENT ASSIGNEE(S):

English

DOCUMENT TYPE: PALAMGUAGE: BE FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO | | DATE |
|--------------------------|---------|-------------|-----------------|--------|----------|
| EP 406762 | A2 | 19910109 | EP 1990-112589 | | 19900702 |
| EP 406762 | A3 | 19911106 | | | |
| EP 406762 | B1 | 19940928 | | | |
| R: DE, FR, GB, | NL | | | | |
| JP 03037292 | Α | 19910218 | JP 1989-172176 | | 19890704 |
| JP 03037293 | A | 19910218 | JP 1989-172177 | | 19890704 |
| JP 03203982 | A | 19910905 | JP 1989-343982 | | 19891228 |
| US 5059863 | A | 19911022 | US 1990-547147 | | 19900703 |
| PRIORITY APPLN. INFO.: | | | JP 1989-172176 | A | 19890704 |
| | | | JP 1989-172177 | A | 19890704 |
| | | | JP 1989-343982 | A | 19891228 |
| ASSIGNMENT HISTORY FOR U | S PATEN | I AVAILABLE | IN LSUS DISPLAY | FORMAT | |
| YTUPP COMPARACY. | MADDAT | 115 (146246 | | | |



An organic electroluminescent device, comprising an organic hole-injection transport layer and an organic luminescent layer formed between 2 electrodes, is claimed in which the luminescent layer contains a compound described by the general formula I (B, R2 = a notionally shearing a substituent; R4 = N or C optionally bearing a substituent, A occopound described by the general formula II (R5, R6, R7, R8 = an aromatic hydrocarbon group optionally bearing a substituent; R4 = N or C optionally bearing a substituent; R4 = N or C optionally bearing a substituent; R4 = N or C optionally substituent aromatic heterocyclic group, or an another property substituted aromatic heterocyclic group

PASSALIAN

RESET (Device component use); USES (Uses)
(electroluminescent devices containing)

(899-51-2 (Devices devices containing)

(899-51-2 (Devices devices containing)

(1,2,5) Omadianolo (3,4-c) pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX



OS.CITING REP COUNT: 11 THERE ARE 11 CAPPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

MISWER 29 08 31 CAPLUS COPYRIGHT 2011 ACS on STN SSSION NUMBER: 1983:198113 CAPLUS Foll-teat MENT NUMBER: 98:198113 ACCESSION NUMBER: DOCUMENT NUMBER:

DOUBMEN UNMERS: 98.198113
GEGINIA, PERFERENCE NO.: 98.10115, JUNE 1
HILE: Reduction of 4,7-diphenyl-1,2,5-thia(ona)diazolo[3,4-c)pyridines affording
2,5-diphenyl-3,4-diaininopyridines and ring closure of
the diamines to fluorescent sasheterocycles
ADTHOR(S): Mataka, finatacy, Itahashi, Essufumi, Imura, Letsuro;
Isahiro, Mazsahi

CORPORATE SOURCE: Res. Inst. Ind. Sci., Kyushu Univ. 86, Kasuga, 816, Japan Journal of Heterocyclic Chemistry (1902), 19(6|,

Journal of Heterocyclic Chemist 1481-8 CODEN: JHTCAD; ISSN: 0022-152X

Journal

OTHER SOURCE(S):

English CASREACT 98:198113

88 Reduction of diptemyl-1,2,5-thiadisəolopyridines, e.g. I (X = 5), and diptemyl-1,2,5-exadisəolopyridines, e.g. I (X = 0), gave diaminodiptemyleyridines, which were converted into fluorescent triasolo[4,5-clpyridines, e.g. II, selendaisəolo[3,4-clpyridines, inidatolo[4,5-clpyridines, and pyrido[5,6-clpyridines. Reduction of 1,2,5-exadisəolo[3,4-clpyridines gave 4,5-dihytro[1,2,5]exadisəolo[3,4-clpyridines.

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI EL: RT [Meactant] and opposite apparatum (Reactant or respect)
[respectation and reduction of]

RM 83713-17-9 CAPLUS

CN [1,2,5] Oxadiazolo[3,4-c] cyridine, 4,7-diphenyl- (CA ENERX NAME)



II 92731-22-67 25751-28-59
Ri: STM (Synthetic preparation); PREP (Preparation)
(preparation of]
RM 65711-22-6 CMPUNS
CM [1,5,5]00xdmiazolo[3,4-c]pyridin=6-methanol, 4,7-diphenyl- (CA INDEX NAME)

85731-38-0 CAPLUS [1,2,5] Oxadiazolo[3,4-c] pyridine-6-carboxylic acid, 4,7-diphenyl- (CA

INDEX NAME



NGSSS-SS-S RL: RCI (Reactant); RACI (Reactant or reagent)

(reduction of) 76593-55-0 CAPLUS

(1.2.5)0xadiazolo(3.4-c)pyridine-6-carboxylic acid, 4.7-diphenyl-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L6 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1981:103255 CAPLOS <u>Full-text</u> 94:103255 DOCUMENT NUMBER:

DOUMBERT MUNESE: 94:102255

ORGENIAL PEFFERMER NO. 94:10255

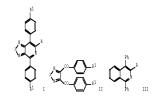
ORGENIAL PEFFERMER NO. 94:10255

Reaction of 3,4-diarcyl-1,2,5-thia-(or -oxa)-diazoles and o-dimenoplemente with mineral acid salts of methylamines having an electron-withdrawing group AUTHOR(S): Mataks, Shundaro; Takhashi, Karufumi; Tashiro, Masashi; Joud, Yuhushe CORPORATE SOURCE: Passanti Joud, Yuhushe CORPORATE SOURCE: Javan

CORPORATE SOURCE:

Japan Synthesis (1980), (10), 842-3 CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE: Journal LANGUAGE: English OTHER SOURCE(S): CASREACT 94:103255



- The condensed pyridines I (X = S, O; R = COZER, COZNe, Cyano, Bs; R1 = R, Me, Cl) were obtained in 41-958 yield by treating II with RCKANGLEW (X = Cl, BSO4). III (R = COZER, cyano) were similarly obtained. (X = CL, CCZ) = (X = C) = (XAΒ

'MSJ'-No-TO
MIST SPM (Symbetric preparation); PREP (Preparation)
 (preparation of)
'MSJ'-SS-0 (REPUS
(12,5)Oxadisolo(),4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl
ester (CA INDEX NAME)



- 76593-56-1 CAPLIS [1,2,5]Oxadiazolo[3,4-c)pyridine-6-carboxylic acid, 4,7-dipbenyl-, methyl ester (CA INDEX NAME)



- 36593_57_2 Caprils
- [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX NAME)



- אפטיינטי שפיינטיט ויפטיינטי אוייטי פטיינטיט. Methanone, (4,7-diphenyl[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]phenyl- (CA NOEX NOME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L6 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1980:76414 CAPLUS Poli-text DOCUMENT NUMBER: 92:76414

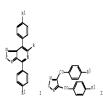
ORIGINAL REFERENCE NO.: 92:12587a,12590a

92:125%, 125%a
A convenient preparation of (1,2,5)oxa- and
[1,2,5] thiadiscolo[3,4-c] pridines
Mataks, Shuckaro, Takahashi, Karufumi; Tashiro,
Masashi
Res. Inst. Ind. Sci., Kyushu Univ., Fukuoka, 812,
Janan TITLE: MITHOR(S).

CORPORATE SOURCE:

Japan Synthesis (1979), (9), 687 CODEN: SYNTBF; ISSN: 0039-7081

DOCUMENT TYPE: Journal LANGUAGE: English



- AB The title compds. I (X = S, R = Ph, CH2OH, CO2Et, R1 = H, Me, C1; X = O, R = Ph, RI = H) were prepared by treating II with RCH2NH2 in the presence of diazabicycloundecene.

 - 726(3)-47-60 RL: SPN (Synthetic preparation); PREP (Preparation)

nu: Say (Synthetic preparation); Prop (Preparation) (preparation of) 72624-47-6 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine, 4,6,7-triphenyl- (CA INDEK NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

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chain nodes : 11 12 ring nodes : 1 2 3 4 5 6 7 8 9 2-11 11-12 ring bonds : ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 11-12 isolated ring systems : containing 1 :

Match level : 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS

L7 STRUCTURE UPLOADED

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⇒ s 17 sss full FULL SEARCH INITIATED 08:03:50 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 476 TO ITE 476 TO ITERATE

100.0% PROCESSED 476 ITERATIONS SEARCH TIME: 00.00.01 61 ANSWERS

61 SEA SSS FUL L7

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http://www.cas.org/support/stmgem/stmdoc/properties.html

=> s 18
SAMPLE SCREEN SEARCH INITIATED 08:04:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 28 TO ITERATE

100.0% PROCESSED 28 ITERATIONS SEARCH TIME: 00.00.01

5 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BAICH **COMPLETE** PROJECTED ITERATIONS: 243 TO 877 5 TO 234

5 SEA SSS SAM L7

=> d 19 ibib abs hitstr 1'IBIB' IS NOT & VALID FORMAT FOR FILE 'REGISTRY'
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

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Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

PEG - PN
SMM - Index Name, NF, and structure - no PN
FTG - All substance data, except sequence data
ILE - FTER, but only 50 names
SQUES - ILE, plus sequence data
SQUES - Same as SQUES, but 3-letter amino acid codes are used

\$Q0 - Protein sequence data, includes RN \$Q03 - Same as \$Q0, but 3-letter amino acid codes are used \$QN - Protein sequence name information, includes RN

EPROP - Table of experimental properties PPROP - Table of predicted properties PROP - EPROP, ETAG, PPROP

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data
IPC -- International Patent Classification

PAIS -- PI, SO STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels IBIB -- BIB, indented, with text labels ISID -- SID format, indented

--- AM, plus Bibliographic Data (original) --- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available

it is available.

The MAX format is the same as ALL plus SPEC.

The IALL format is the same as ${\tt ALL}$ with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help

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ENTER DISPLAY FORMAT (IDE):end

=> file registry COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.51 778.90 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION 0.00 -26.9 CA SUBSCRIBER PRICE

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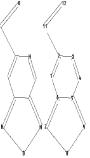
http://www.cas.org/iegal/infopolicy.html

TSCA INFORMATION NOW CURRENT THROUGH January 14, 2011.

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REGISTRY includes numerically searchable data for experimental and recoion includes industrially sectionals data of the experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to: http://www.cas.org/support/stmgen/stmdoc/properties.html

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ring nodes : 1 2 3 4 5 6 7 8 9 chain bonds 2-11 11-12 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 11-12 exact bonds : 2-11 7-8 8-9 isolated ring systems : containing 1 :

Match level : 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CCLASS

L10 STRUCTURE UPLOADED

SAMPLE SEARCH INITIATED 08:04:29 FILE 'REGISTRY' 28 TO ITERATE SAMPLE SCREEN SEARCH COMPLETED -

100.0% PROCESSED 28 ITERATIONS SEARCH TIME: 00.00.01 5 ansures

ONLING
BAICH **COMFGG.
243 TO 877
5 TO 234 PROJECTED ITERATIONS: 5 SEA SSS SAM L10

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

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http://www.cas.org/support/suppen/stndoc/oroperties.ntml

SAMPLE SEARCH INITIATED 08:04:37 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 28 TO ITERATE

100.0% PROCESSED 20 ITERATIONS SEARCH TIME: 00.00.01 5 ANSWERS

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BATCH **COMPLETE**

5 SEA SSS SAM L10

=> s 110 sss full FULL SEARCH INITIATED 08:04:41 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 476 TO ITE

100.0% PROCESSED 476 ITERATIONS SBARCH TIME: 00.00.01 61 ANSWERS

L13 61 SEA SSS FUL L10

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RRGISTRY includes numerically searchable data for experimental and recoustur incruses numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndos/properties.html

⇒ s 113 SAMPLE SEARCH INITIATED 08:04:48 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -28 TO ITERATE

100.0% PROCESSED 28 ITERATIONS SEARCH TIME: 00.00.01 5 ANSWERS

5 SEA SSS SAM L10

⇒ d 114 ibib abs hitstr 1-'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY' 'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY' 'HITSIR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SMM - Index Name, NF, and structure - no RN
FIGS - All substance data, except sequence data
INS - FIES, but only 50 names
SQIMS - INS, plus sequence data
SQIMS - SMM - SQUE, but l-letter sains acid codes are used
SQU - Protein sequence data, includes RN
SQU - Same as SQL but l-letter amino acid codes are used
SQU - Same as SQL but l-letter amino acid codes are used
SQU - Protein sequence name information, includes RN

EPROP - Table of experimental properties

PPROP - Table of predicted properties PROP - EPROP, ETAG, PPROP

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance format must be cited first. The CA File predefined formats are:

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

-- Index Data

IPC -- International Patent Classification

PAIS -- PI, SO SID -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels IBIB -- BIB, indented, with text labels ISID -- STD format, indented

OBIB ------ AN, plus Bibliographic Data (original) OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when available

It is available.

The MAX format is the same as ALL plus SPEC.

The TALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help

HBLP DFIELDS -- To see a complete list of individual display fields. HBLP FORMAIS -- To see detailed descriptions of the predefined formats. ENTER DISPLAY FORMAI (IDE):end

⇒ file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL

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CAS Information Use Policies apply and are available at:

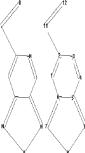
http://www.cas.org/legal/infopolicy.html TSCA INFORMATION NOW CURRENT THROUGH January 14, 2011.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in RBGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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chain nodes : ring nodes : 1 2 3 4 5 6 7 8 9 chain bonds 2-11 11-12 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 11-12 2-11 7-8 8-9 isolated ring systems : containing 1 :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS

L15 STRUCTURE UPLOADED

=> s 115 sss full1

COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID COMBINITION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains but search terms created by
structure-building or screen commands and text search terms. LHs
created wis the FORDUTURE or SCENER Commands must be searched in the
structures files separately from text terms or profiles. The LH
answer sets from structure searches can be used in crossover searches
and can be combined with text terms.

 \Rightarrow s 115 sss full FULL SEARCH INITIATED 08:05:28 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 476 TO ITERATE

100.0% PROCESSED 476 ITERATIONS SBARCH TIME: 00.00.01

L16 61 SEA SSS FUL L1S

⇒ file caplus COST IN U.S. DOLLARS STINCE FILE TOTAL ENTRY 196.86 FULL ESTIMATED COST

61 ANSWERS

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FILE COVERS 1907 - 15 Jun 2011 VOL 154 ISS 25 FILE LAST URRATED: 14 Jun 2011 (20110614/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2011 USFTO HANKAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2011

CAplus now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

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⇒ s 116 L17

=> d 117 ibib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 29 AMSWERS - CONTINUE? Y/(N):y

LL? ANSWER 1 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN

PAUS COMPRIGHT 2011 ACS on STN
2010:205465 CARNUS Full-teat
152:257118
Anole- or imidazole-type fluorescent dyes for
biomolecule detection with improved water solubility
and labeling efficiency
Luche, Shinichiro; Mataga, Shundaro

INVENIOR(S): PATENT ASSIGNEE(S):

Japan Jpn. Kokai Tokkyo Koho, 24pp. SOURCE: CODEN: JKKKAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| DATE | APPLICATION NO. | 192 2010/03/511 | A 2010/218 | 372 2008-205238 |
| PEICHITY APPLM. NIFO. | JP 2008-205238 |
| CHER SOURCE(5): | MARPAT | 152:25718 | GE DATE 20080808

06103-55-09 - 857048-00-0F RL: IMF (Industrial manufacture); RCI (Reactant); PREP (Preparation); RACI (Reactant or reagent)

(intermediate; azole- or imidazole-type fluorescent dyes bearing N (intermediate; snole- or inideable-type Honorseant dyes bearing N cation - of Honorataining Groups for binon). detection with improved water solubility and labeling efficiency (So-So-G-BUMS) (1), 5) (Danial snole (), 4-c) pyridise-6-carboxylic acid, 4, 7-diphenyl-, ethyl eater (CA IMEN NAME)



857048-00-1 CAPLUS (1,2,5)0xadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxypbenyl)-, ethyl ester (CA INDEX N



L17 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: 2009:138769 CAPLUS <u>Full-text</u> 150:163068

Diagnostic agent, and diagnosis method using it Isobe, Shinichiro TITLE: INVENTOR(S):

PATENT ASSIGNEE(S): Japan SOURCE: PCT Int. Appl., 86pp CODEN: PIXXD2

DOCUMENT TYPE: Patent

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

KIND DATE APPLICATION NO.

RE: ABU (Analytical role, unclassified); SPN (Synthetic preparation); AMST (Analytical study); PREP (Preparation)

(diagnostic agent/method using high intensity fluorescent dye for

labeling antibody) RN 921934-98-7 CAPLUS

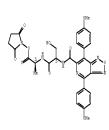
CN B-Alanine, N-[[4,7-his(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

RN 921935-04-8 CAPLUS

L-Serine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

CN L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5] oxadiazolo(3,4-c)pyridin-6-yl]carbonyl)-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CM INDEX NOME)

Absolute stereochemistry.



RN 1107629-28-6 CAPFLUS
CN D-Alanine, N-[(4,7-bis(4-methoxyphenyl)|[1,2,5]oxadiazolo[3,4-c]pyridin-6yl]carbonyl]-3-sulfo-, 1-(2,5-dioxo-1-pyrrolidinyl) ester (CA INDEX NAME)

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(diagnostic agent/method using high intensity fluorescent dye for labeling antibody| RN 855781-83-8 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)



855781-84-9 CAPLUS

[1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

857048-00-1 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid. 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

RN 921934-97-6 CAPLUS

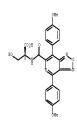
CN β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl] - (CA INDEX NAME)

921935-01-5 CAPLUS L-Alanine, N-[[4,7-bis(4-pethoxyphenyl)[1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]-arboxyl]-3-sulfo- (CA INNEX NAME)

Absolute stereochemistry.

RN 921935-03-7 CAPLUS

L-Serine, N-[(4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]- (CA INDEX NAME)



RN 921935-05-9 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INDEX NAME)

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:1427466 CAPLUS <u>Fuli-test</u>

DOCUMENT NUMBER:

2008:182766 CAPUNS Fall-rest 150:2316 Biological tissue specimen production method Isobe, Shimichiro Japan Jps. Nokai Tokkyo Koho, 13pp. CCEBH: WRINZA Patent TITLE: INVENTOR (S)

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE: Je FAMILY ACC. NUM. COUNT: 1 Japanese PATENT INFORMATION:

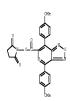
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------|--------------|-----------------|----------|
| | | | | |
| JP 2008286694 | A | 20081127 | JP 2007-133009 | 20070518 |
| PRIORITY APPLN. INFO.: | | | JP 2007-133009 | 20070518 |
| OTHER SOURCE(S): | CASRE | NCT 150:2316 | | |

OTHER SOURCE(S): CASRBAIT 150:2106

A hiol. tissue specimes production method is provided, which enables to prevent a sample from changing its state or shape even after dehydration followed by drying, and thereby, observe the sample in a state close to a living booy. The hiol. tissue specimes production method comprises dehydrating tissue or cells collected from a test subject using a dehydrating agent consisting of an ether alo. (e.g., ethomographor) or a glyicidy ether. The method enables to prevent a sample from getting distorted or contracted to cause a change in its state or shape unlike the case with an alo. or acctome which has been traditionally used, and thereby, realize a pathol. diagnosis with him explicitly are a similar to the contract of the

with high reliability. 255781-89-9P ΙT

255/Sic. sol-SP Ri. ABU (Rashytical role, unclassified); RCI (Reactant); SPN (Synthetic preparation); NNSI (Realytical study); PREP (Preparation); RRCI (Reactant or reagent) (Mol. tissue specimen production method using ether alc. for dehydration) 855/81-84-9 (NRUMS [1,5]DataStool(), 4-c]pyridine-6-carboxylic acid, 4,7-his(4-sethoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NRME)



255/81-cs-SP SI/05-06-15
RG: RCI (Reactant); SPM (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent) [[Reactant or reagent] [[Reactant or reagent] [[Reactant or reagent] [[Reactant or reagent]] [[Reactant or reagent]] [[Reactant or reagent]] [[Reactant or reagent]] [[Reactant or reactant or reacta

857048-00-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

L17 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:975444 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 149:225936 TITLE:

Polymerizable azole fluorescent dues with high

Polymeriable asole fluoreacent dyes with high fluoreacent intensity and pod wather resistance, and their manufacture and polymers Labeb, Shinichiro; Mataga, Shoetaro; Miraki, Keiji; Ianimaka, Edniro; Kawashim, Shinichi; Isakuda, Iakahico Barima Chemicals, Inc., Japan Jgn. Kokai Tokkyo Koho, 32pp. COERN: JONGAP Patent

INVENIOR(S):

PATENT ASSIGNEE(S):

DOCUMENT TYPE: LANGUAGE: J FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A 20080814 JP 2007-21687 JP 2008184592 20070131

JP 2007-21687 PRIORITY APPLN. INFO.: 20070131 CASREACT 149:225936; MARPAT 149:225936 OTHER SOURCE(S):

 \star structure diagram too large for display - available via offline print \star



[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



921935-07-1 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)



IT 194382-80-59 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACI (Reactant or reagent);

USES (USes)

(polymerizable asole fluorescent dyes with high fluorescent intensity and good weather resistance, and their manufacture and polymers|
104382-90-5 CARUS

(1,2,5)Data iso(0,2,+c)pyridine-6-carboxanide,
4,7-his(4-methoxymbenyl)-N-2-propen-1-yl- (CA INDEX NOME)

IT 1943092-84-99 1943092-95-09 (043882-96-)P

RE: IMF (Industrial manufacture); IBM (Technical or engineered material use); PREP (Preparation); USES (Usea) (polymerizable asole fluorescent dyes with high fluorescent intensity

and good weather resistance, and their manufacture and polymers|
RN 1043892-94-9 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxamide,
4,7-bis(4-methoxyphenyl)-N-2-propen-1-yl-, homopolymer (CA INDEX NAME)

CRN 1043892-90-5 CMF C23 H20 N4 O4

CM 1

[1,2,5] Oxadiazolo[3,4-c]pyridine-6-carboxamide, 4,7-bis(4-methoxyphenyl)-N-2-propen-1-yl-, polymer with ethenylbenzene

(CA INDEX NAME)

CRN 1043892-90-5 CMF C23 H20 N4 O4

CM 2

CRN 100-42-5 CMF C8 H8

RN 143892-96-1 CAPCAS CW 2-Propensis acid, 2-methyl-, methyl ester, polymer with 4,7-hig/4-stromyphenyl-H-2-propen-1-y2[1,2,5]oxadiazolo[3,4-c]pyridine-6-carboxanide (CA INEEX NAME)

CM 1

CRN 1043892-90-5 CMF C23 H20 N4 O4

CM 2

CRN 80-62-6 CMF C5 H8 O2

H2C Ne________ONG

L17 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:829336 CAPLUS <u>Foll-text</u> 149:130464 DOCUMENT NUMBER:

TITLE: INVENTOR (S):

149:13046
Asol-based fluorescent dyes and their preparation
Isobe, Shimichiro; Mataga, Shumtaro
Jagan
Jen. Kokai Iokkyo Koho, 34gp.
COURN: 30038
Petent
Japanese

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE: Ja FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 2008156556 A 20080710 JP 2006-349504 20061226 PRIORITY APPLN. INFO.: 20061226 OTHER SOURCE(S): CASREACT 149:130464; MARPAT 149:130464

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The fluorescent dyes are azoles I, II, or III [Rl is LM in I and III; Rl or R4 The flowrescent dyes are scales I, II, or III [R1 is M in I and III; R1 or R4 is M in II. H c | mul substituted pyridinium, anison, piperidinium, piperainium, inidasolium, ostaolium, benzinidasolium, benzinidasolium, ostaolium, benzinidasolium, b

application to high-sensitivity detection of biomols.

102110-15-5
RL: RCI (Resectant); RACI (Reactant or reagent)
(preparation of azoles having N-containing cationic groups as fluorescent

[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, propyl ester (CA INDEX NAME)

L17 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2000:777672 CAPLUS Full-text
LOCUMENT NUMBER: 149:111760
TITLE: hair compositions comprising a hair compositions comprising a direct dye and a thickener

INVENTOR (S): Plos, Gregory PATENT ASSIGNEE(S): L'Oreal, Fr. Fr. Demande, 68pp SOURCE:

CODEN: PRXXBL DOCUMENT TYPE: Patent French

FAMILY ACC. NON. COUNT:

KIND DATE APPLICATION NO. DATE

REDIT NO. REDIT DATE APPLICATION NO. INTE
FR 2919277 Al 20086627 FR 2006-55952 20061226
FRICERITY APPLAINTO: FR 2006-55952 20061226
FRICERITY APPLAINTO: FR 2006-55952 20061226
OTHER ROUNCE(5): MARPHAI 149:111.768

The invention relates to a bair composition including a particular direct dye and a thickners. It also relates to a process of dysing human shair. Thus, a composition contained an oxadisalopyridine derivative 3 - 10-3 and 14, PEG 6, parabess 0.06, hydroxyethyl cellulose 0.12, polyglycoside 5, bensyl alc. 4, water to 50%, and citate theriffer ag to 100%.

If NSSY 38-8 19529-38-51 76793-38-2 100%.
20574-1-1 24055-1-1-5 15795-38-2 100%.
20574-1-1 24055-1-1-5 15755-1-3-5

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(Nair compns. comprising direct dye and thickener)

RN 76593-55-0 CRPUS

CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INDEX NAME)

76593-56-1 CAPLUS

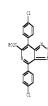
[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, methyl ester (CA INDEX NAME)

76593-58-3 CAPLUS

 $\label{eq:Methanone} $$ $ (4,7-diphenyl\{1,2,5\})$ exadiazolo\{3,4-c\}pyridin-6-yl)phenyl- $$ $ $ INDEX NOME $$ $$$

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA

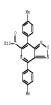
224430-73-3 CAPLUS (1,2,5)0xadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-chlorophenyl)- (CA INDEX NAME)



- RN 225795-70-0 CAPLOS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



- RN 225795-71-1 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)



- RN 421555-11-5 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-di-2-thienyl- (CA NUDEX NAME)



- RN 421555-29-5 CAPAUS
 CN [1,2,5]Oxadiacolo[3,4-c]pyridine-6-carboxylic acid, 4,7-di-2-thienyl-, ethyl ester (CA INDEX NAME)

- RN 421555-30-8 CAPLUS
 CN [1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid, 4,7-di-2-furanyl-,
 ethyl ester (CA INDEX NAME)



- RN 421555-31-9 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(5-methyl-2-thienyl)-, ethyl ester (CA INUEX NAME)



- PN 421555-32-0 CAPLUS
 CN [1,2,5] Oxadiazolo[3,4-c] pyridine-6-carboxylic acid,
 4,7-bis(5-bromo-2-thienyl)-, ethyl ester (CA INDEX NAME)



- RN 421555-33-1 CAPLOS CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(2,5-dinethyl-3-thianyl)-, ethyl ester (CA INDEX NAME)



- RN 421555-34-2 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(5-phenyl-2-thienyl)-, ethyl ester (CA INDEX NAME)



- 421555-35-3 CAPLUS
 [1,2,5]Oxadiarolo(3,4-c)pyridine-6-carboxylic acid,
 4,7-bis(5-cyano-2-thienyl|-, ethyl ester (CA INDEX NAME)



- PN 847203-13-8 CAPLUS
 CN [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carbonyl chloride, 4,7-diphenyl- (CA INDEX NAME)



- RN 855781-83-8 CAPLUS
 CN [1,2,5] Oxadiazolo(3,4-c)pyridine-6-carboxylic acid,
 4,7-his(4-methoxyphenyl)- (CA INDEX NAME)



- RN 857048-00-1 CAPLUS
 CN [1,2,5]0xadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



- PN 865091-72-1 CAPLUS
 CN [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid,
 4,7-bis([1,1"-biphenyl]-4-yl]-, ethyl ester (CA INDEX NAME)



- RN 865091-73-2 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(5-phenyl-2-thienyl)- (CA INDEX NBME)



- RN 908866-53-5 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methylphenyl)- (CA INDEX NAME)



- RN 908866-55-7 CAPLUS
 CN Ethanesulfonic acid, 2-[[[4,7-bis(4-methylphenyl][1,2,5]oxadiszolo[3,4-c]pyridin-6-yl]carbonyl]anino]- (CA NOEK NAME)



13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

LL? ANSWER ? OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

PRUS CORPIGET 2011 ACG on SNN
2008:771665 CARRUS Full-teat
149:111759
Bair compositions comprising direct dyes and
surfactants
Plos, Gregary
L'Oreal, Fr.
Fr. Demarde, Sigp.
COCEN: PRUEE
Baired
Baired
Baired
Baired
Baired INVENIOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent LANGUAGE: Fx FAMILY ACC. NUM. COUNT: 1 French

PATENT INFORMATION:

PAIRNI NO. KIND DATE APPLICATION NO. DATE

FR 2910278 Al 20086027 FR 2006-55953 20061226

PRIORITH APPLN. 1NO.: 7 FR 2006-55953 20061226

OTHER SOURCE(S): 9APRAT 149:111759

AB The invention relates to a composition including a direct dys and surfactant. That also relates to to use of this composition for coloring human hair. Thus, a composition contained an oxadiazologyridine derivative 3 + 10-3 no.1, 4 Centra COURS 2008-10-1 (2008-10-1) (2008-1

SQ2260-55-7 Bir COB (Commetic use); BIOL (Biological study); USES (Uses) (hair compns. comprising direct dyes and surfactants) 76593-55-0 CARDUS (1,2,5)Domaiosolof)+celpyridine-6-carboxylic acid, 4,7-diptenyl-, ethyl ester (CA INGEN NAME)

PN 76593-56-1 CAPLUS
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-dipbenyl-, methyl eater (CA INDEX NAME)

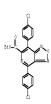


76593-58-3 CAPUIS
Methanore, (4,7-diphenyl[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]phenyl- (CA
NOEK NOME)

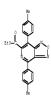
RN 224430-73-3 CAPLUS
CN [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid,
4,7-bis(4-chlorophenyl)- (CA INDEX NAME)



RN 225795-70-0 CAPLUS
CN [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid,
4,7-mis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



RN 225795-71-1 CAPLUS
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)



- RN 421555-11-5 CAPLUS
- [1,2,5]0xadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-di-2-thienyl- (CA RNDEX NAME)



421555-29-5 CAPLUS [1,2,3]Oxadiarolo(3,4-c)pyridine-6-carboxylic acid, 4,7-di-2-thienyl-, ethyl ester (CA INDEX NAME)



421555-30-8 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-di-2-furanyl-, ethyl ester (CA INDEX NAME)



421555-31-9 CAPUUS
[1, 2, 5] Oxadiarolo[3, 4-c]pyridine-6-carboxylic acid,
4, 7-his(5-methy1-2-thieny1)-, ethyl ester (CA INDEX NAME)

421555-32-0 CAPRUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(5-bromo-2-thienyl]-, ethyl ester (CA INDEX NAME)



RN 421555-33-1 CAPLUS
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-his(2,5-dinethyl-3-thienyl)-, ethyl ester (CA INDEX NAME)



RN 421555-34-2 CAPLUS
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-his(5-phenyl-2-thienyl)-, ethyl ester (CA INDEX NAME)



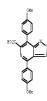
421555-35-3 CAPLUS [1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(5-cyano-2-thienyl)-, ethyl ester (CA INDEX NAME)



847203-13-8 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-diphenyl- (CA INDEX NOME)



RN 855781-83-8 CAPLUS
CN [1,2,5] Oxadiazolo(3,4-c] pyridine-6-carboxylic acid,
4,7-his(4-nethoxyphenyl)- (CA INDEX NAME)



- 857048-00-1 CAPLUS
- GJ.950-00-1 CAPMUS (1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-his(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



- 865091-72-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis([1,1'-biphenyl]-4-yl)-, ethyl ester (CA INDEX NAME)



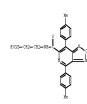
- RN 865091-73-2 CAPLUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(5-phenyl-2-thienyl)- (CA INDEX NAME)



- RN 908866-53-5 CAPLUS
 CN [1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methylphenyl)- (CA INDEX NAME)



- RM 908866-55-7 CAPLUS
 CN Ethanesulfonic acid, 2-[[{4,7-bis(4-methylphenyl)[1,2,5]oxadiarolo[3,4-c]pyridin-6-yl]carbonyl]anino]- (CA INDEX NOME)



13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER:

DOCUMENT NUMBER:

FRUIS COMPIGENT 2011 Acts on STN
2006:548112 CAPRING Sull-trace
148:50065 compositions containing electroluminescent
days.
Schinichiro
Japan
Jpn. Notai Tokkyo Noho, 43pp.
COSEN: JUNIORS
Patent
Jananesee

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

Japanese LANGUAGE: Je FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| | | | | |
| JP 2008105976 | A | 20080508 | JP 2006-288905 | 20061024 |
| PRIORITY APPLN. INFO.: | | | JP 2006-288905 | 20061024 |
| THER SOURCE(S): | MARPAT | 148:502662 | | |

- DARPAT 148:502662 post-composition containing an organic BESONCE(S): MARPAT 148:502662 post-composition containing an organic Flourescent depenhaving an organic electrolumisoncent (EU) coloring region consisting of conjugated stole derivative or initiatel derivative including 2 heterostan, selection atom, or botton star. The Hoursecont dynamy further have an amino acid or peptide linker region. The cossetic composition provides long-lasting hrightness to nail, hair, etc., without causing damage. For example, 4,7-bisi(4-enthosypen)-1/1,5-semalison(-0,5-(e))-gidines—carboxylic acid [8-lanine and H-hydroxysoccinizide derivative was prepared, and examined for its fluorescent property for 2 wk. #2103-0-0-12 \$1233-0-1-5 \$1

- (obes)
 (cosmetic compos. containing electroluminescent dyes)
 RM 857048-00-1 CAPLUS
 CN (1,2,5)@xadiazolo(3,4-c]pyridine-6-carboxylic acid,
 4,7-mis(4-methoxyphenyl)-, ethyl ester (CA NOEX RAME)



- PN 921934-97-6 CAPLUS
- CN β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

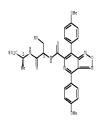
- 921935-01-5 CAPLUS
- L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl]carbonyl]-3-sulfo- (CA INDEX NAME)

Absolute stereochemistry.

- RN 921935-03-7 CAPLUS
 CN L-Serine, N-[[4,7-his(4-methoxyphenyl)(1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

- 921935-05-9 CAPLUS L-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5] oxadiarolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INNEX NAME)

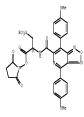
Absolute stereochemistry.



- II 921554-92-09 521925-62-69 921555-62-69 821355-02-69
- 20133-0-0-09
 Bi: COS (Cosmetic use); SFN (Synthetic preparation); BIOG (Biological study); PFPP (Preparation); NSES (Uses)
 (cosmetic compos. containing electroluminescent dyes)
 FN 92194-94-7 (CAPUE)
 FN 92194-94-7 (CAPUE)
 (D P-Alazine, Pt.(4, T-bini4/caethoxyphenyl) [1, 2, 5] osadianolo[), 4| pypridis-6-yl] carboxyl]-, 2, 5-dicon-1-pyrrolidinyl ester (CA INDEX NAME)

- RN 921935-02-6 CAPLUS
 CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5] oxadiszolo[3,4-c]pyridin-6yl]carbonyl]-3-sulfo-, 2,5-dioxo-1-pyrrolidinyl ester (CR INDEN NAME)

Absolute stereochemistry.



921935-04-8 CAPLUS L-Serine, N-[[4,7-bis(4-methoxypbenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrolidinyl ester (CA INDEX NAME)

L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiarolo(3,4-c)pyridin-6-yl)carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA RUDEX NOME)

storage. Also disclosed are a method for preparing such a biol. specimen, and

storage. Also disclosed are a method for preparing such a hiol. specimen, and a method for observing such a hiol. specimen. Specifically disclosed is a hiol. specimen, wherein tissue or cells labeled with a fluorescent dye is fixed onto a support base material. The fluorescent dye possesses a chromogenic portion composed of all least an organic EL dye, and the organic EL dye is composed of an anole derivative or inideable derivative which possesses a conjugated system, while containing more than one kind of heteroatom, selemina atom or horon atom. \$50020.44.5 2010-0-2.5 2010-0-2.5 \$1000-0-3.5 \$1000. (Biological study); USES (Uses)

(Uses)
(biol. specimen labeled with novel fluorescent dye, and preparation method)
855781-84-9 CAPMUS

855/81-84-9 CAPMUS
[1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN CN

IT 1021948-25-6

RE. RCI [Reactant]; RACI (Reactant or reagent)
[respectation of commetic compas. containing electroluminescent dyes)

RM 102148-25-6 CARUS

CI [1,2,5] Constantians[0,4,4-o]pyridine-6-carboxylic acid, 4,7-diptenyl-, propyl exter (CA INCEX NOME)

II 68572-63-67 95791-24-95
RL: RCI (Reactant); SRN (Synthetic preparation); PREP (Preparation); PRCI (Reactant or reagent)
(Research or reagent)
(Research or commercial compos. containing electroluminescent dyes)
(R 10, 2.5) Section 26.6 (April)
(1, 2.5) Section 26.6 (April)
(4, 1-bis(4-sethoxyphenyl) - (CA INDEX NOME)

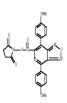
Absolute stereochemistry.

RN 921935-04-8 CAPLUS
CN L-Serine, N-[(4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo(3,4-c)pyridin-6-yl)carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

RN 921935-06-0 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl)][1,2,5] oxadiazolo[3,4-c]pyridin-6yl]carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 855781-84-9 CAPLUS
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxypbenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



LI7 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:122337 CAPLUS Fall-text
DOCUMENT NUMBER: 148:163065
TITLE: Biological specimen labeled wit

148:153Ub3 Biological specimen labeled with novel fluorescent dye, and its preparation method Isobe, Shinichiro; Nakamura, Keiichiro; Kanemaru,

INVENTOR(S):

Takaaki PATENT ASSIGNEE(S):

Japan PCT Int. Appl., 91pp. CODEN: PIXXD2

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PAT | ENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | Di | ATE | |
|-----|------|------|------|-----|--------|------|------|------|-----|------|------|------|-----|----------------------------|-----|------|-----|
| | | | | | | | | | | | | | | | | | |
| Ю | 2008 | 0132 | 50 | | Al | | 2008 | 0131 | | WO 2 | 007- | JP64 | 755 | | 2 | 0070 | 727 |
| | И: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | Βħ, | BB, | BG, | BH, | BR, | ВИ, | BY, | BΣ, | CA, |
| | | CH, | CN, | CO, | CR, | CU, | CΣ, | DE, | DK, | IM, | DO, | DZ, | EC, | $\mathbb{E}\mathbb{E}_{r}$ | EG, | ES, | FI, |
| | | GB, | GD, | GE, | GH, | GM, | GI, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, |
| | | KM, | ĸN, | KP, | KR_r | Κ2, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | ME |
| | | MG, | MK, | MI, | МW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | œ, | PG, | PH, | PL |
| | | Pī, | RO, | RS, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | IJ, | TM, | TN |
| | | TR, | TT, | 12, | UA, | UG, | US, | Už, | VC, | W, | žA, | 2M, | 214 | | | | |
| | RW: | λī, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | ΗU, | ΙE |
| | | IS, | IT, | LT, | LU, | LV, | MC, | MT, | NL, | PL, | PT, | R0, | SE, | SI, | SK, | TR, | BF |
| | | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | G₩, | ML, | MR, | NE, | SN, | TD, | TG, | BW |
| | | GH, | GM, | KE, | LS, | 101, | MΣ, | NA, | SD, | SL, | SZ, | TZ, | UG, | 2М, | ZW, | AM, | A2 |
| | | BY, | KG, | KZ, | MD, | RU, | IJ, | TM | | | | | | | | | |
| HTY | APP | LN. | INFO | . : | | | | | | JP 2 | 006- | 2063 | 95 | 1 | 3 2 | 0060 | 728 |

PHIGNIL APPER. 1880:

OTHER SOURCE(S): MAMPRAT 148:16:3065

AB A biol. specimen is provided, which can be prepared at low cost, and wherein fluorescence of a fluorescent dye does not disappear even after a long time

II (0215) 6-25-6

II (2239-23-5

BL: BCI [Reactant]; RACI (Reactant or reagent)

(miol. specimen labeled with novel fluorescent dye, and preparation method)

RN 102148-25-5 CAFLOX

(l.2,5)Sociations(o)[4,4-c]pyridine-5-carboxylic acid, 4,7-diptenyl-, propyl

ester (CA INUEX NAME)

II \$85721-33-20 \$27035-35-19 \$51972-37-50
20183-01-50 \$11275-35-10 20183-35-50
MR: BCT (Reactant); SRM (Synthetic preparation); PREP (Preparation); RACT (Reactant or respent)
(Biol. apecimen labeled with novel fluorescent dye, and preparation method)
CN (1, 2,5)Candisolo(3,4-c)pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl) - (CA INDEX NAME)

921934-98-7 CAPLUS

CN

921935-02-6 CAPUNS L-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



857048-00-1 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

RN 921934-97-6 CAPLUS

β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

RN 921935-01-5 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-methoxymbenyl][1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INNEX NAME)

921935-03-7 CAPLUS

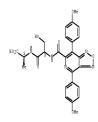
L-Serine, M-[[4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 921935-05-9 CAPLUS

L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl)carbonyl)-L-seryl- (CA INDEX NAME)

Absolute stereochemistry.



14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

LI7 MASHER 10 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1408272 CAPLUS Foll-text
DOCUMENT NUMBER: 144288352
IIILE: 10ward a Rational Design of Del-

148:28352 Toward a Rational Design of Poly(2,7-Carbazole| Derivatives for Solar Cells Blowin, Nicolas; Michaud, Alexandre; Gendron, David; Wakim, Salem; Blair, Emily; Neagu-Plesu, Rodica; AUTHOR(S):

Belletete, Michel; Durocher, Gilles; Tao, Ye; Leclerc,

CORPORATE SOURCE: Canada Research, Electroactive and Photoactive Canada Research, Electroactive and Photoactive Polymers, Department of Chiniar, Ginversite Laval, Quebec City, CO, GLK TMP, Can. Journal of the American Chemical Society (2000), 130(2), 732-742 COMERS: ANSARY, ISSN: 0002-7863 American Chemical Society Journal

SOURCE.

PUBLISHER: DOCUMENT TYPE: LANGUAGE: English CASREACT 148:288352 OTHER SOURCE(S):

LANGUAGE:

Bengliah

There theor. models and calcars, several alternating polymeric structures were studied to develop optimized poly[2]. "e-shanolel derivs. for solar cell applications. Selected low land app alternating copylwers were obtained via a Soundi conguling reaction. A pade correlation between PET theor. calcas. performed on model compds. and the emptl. BGNO, LDNO, and band gap energies of the corresponding polymers was obtained. This study reveals that the alternating copylanger BOD energy level is mainly fissed by the carabacle moiety, whereas the LDNO energy level is mainly related to the nature of the electro-withdrawing commoners: bowever, solar cell performances are not solely driven by the energy levels of the materials. Clearly, the mol. weight and the overall organisation of the polymers are other important key parameters to consider when developing new polymers for solar cells. Perliminary pseuscreents revealed hole mobilities of agport. 10-0. cml/"-s and a power conversion efficiency (PCB) up to 3.64. Further improvements are asticipated through a rational design of new sym. low band gap poly(2,7-coarbacle) derive. carbazole| derivs

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); RCI (Reactant); SPN (Synthetic preparation);

PREP (Preparation); PROC (Process); RACT (Reactant or reagent) (toward rational design of poly(2,7-carbazole) derivs, for solar cells) 1007128-75-7 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(5-bromo-2-thienyl)- (CA INDEX NAME)



yl)[1,2,5]oxadiazolo[3,4-c)pyridine-6-carboxylate RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI Ei: BC [Beactant]; SPM (Sympthetic prepalsa.sum); come (1.-pensatur) reagent) [Beactant or reagent] [toward rational design of poly[2,7-carbarole] derive. for solar cells] 21:255-22-0 CAPUNS [1,2,5]Osadismole[2,4-c]pyridime-6-carboxylic acid, 4,7-his[5-bromo-2-thiesyl]-, ethyl ester (CN INDEX NAME)

OS.CITING REF COUNT: 278 THERE ARE 278 CAPLUS RECORDS THAT CITE THIS

REFERENCE COUNT:

BECORD (282 CITING)

104 THERE ARE 104 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

LIT MISSER 11 OF 29 CAPLUS COMPRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1389948 CAPLUS Fall-text
TOCOMENT NUMBER: 182/2754
TITLE: Floorsecent dye-bound diagnostic agent for labeling antibody, and diagnostic method using it

INVENTOR (S) Isobe, Shinichiro PATENT ASSIGNEE(S): Japan Jpn. Kokai Tokkyo Koho, 47pp. SOURCE: CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: 1

KIND DATE A 20071206 JP 2006-142648 JP 2006-142648 JP 2007315779 PRIORITY APPLM. INFO.:

PRIORITY APPEN. INFO.:

MARPAT 148:27194

B A diagnostic agent is provided, which uses a floorescent dye with high
floorescence intensity, and exhibits a high labeling rate to an antibody. The
diagnostic agent comprises at least an activody and a floorescent dye for
labeling the antibody, wherein the floorescent dye prolabeling the antibody, wherein the floorescent dye proninding with the antibody. The diagnostic agent enables to improve the
labeling rate to an antibody in comparison with the conventional method, and
detect an antipon with high sensitivity by a high floorescence intensity even
in a solid state. Also provided is a diagnostic method using this diagnostic
agent.

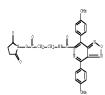
agent.
IT 52:034-98-TP 92:935-04-80 52:935-95-0P 55:396-55-0P

RL: ARG (Analytical reagent use); SRN (Synthetic preparation); MMST (Analytical study); PREP (Preparation); USES (Uses)

(fluorescent dye-bound diagnostic agent for labeling antibody, and

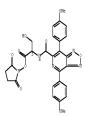
diagnostic method) RN 921934-98-7 CAPLUS

CN \$\beta-\text{Rainine}, \text{N=[[4,7]-his(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)



921935-04-8 CAPBUS L-Serine, N-{(4,7-bis(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.



RN 921935-06-0 CAFLUS
CN L-Alanine, N-[[4,7-bis4-methoxyphenyll[1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

959396-50-0 CAPLUS
Alamine, N-[[4,7-bis(4-methoxyphenyl)][1,2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]-3-sulfo-, 1-(2,5-dioxo-1-pyrrolidinyl) ester (CA INGEX NAME)



IT 888781-88-80 820780-84-89 887043-59-10 221523-37-69 821238-02-10 921523-88-99 920394-42-79

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI Mis MC1 (Reactant, reason) (Reactant or reagent) (fluorescent dye-bound diagnostic agent for labeling antibody, and diagnostic method)

(lincrescent dye-round diagnostic agent for label diagnostic method) 855781-83-8 CAPLUS [1,2,5] Oxadianolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CA NDEX NAME)

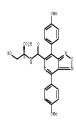
855781-84-9 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

RN 857048-00-1 CAPLUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



RN 921934-97-6 CAPLUS

RN 921935-03-7 CAPCUS
CN L-Serine, N-[[4,7-his(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl)- (CA INDEX NAME)



RN 921935-05-9 CAPLUS
CN L-Alanine, N-[(4,7-bis(4-methoxyphenyl) [1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carboxyl]-L-seryl- (CA INDEX NAME)

Absolute stereochemistry.

RN 95336-49-7 CAPLUS
CN Alanine, N-[[4,7-bis(4-methoxypbenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INDEX NAME)



L17 MISMER 12 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2007:167743 CAPLUS Full-text DOCUMENT NUMBER: 146:231129

146:231129
Marking agents containing organic EL colorants, their detection, and spray devices
Isobe, Shinichiro TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

Japan
Jpn. Kokai Tokkyo Koho, 4lpp.
CODEN: JKKXAF
Patent

DOCUMENT TYPE: LANGUAGE: Japanese
FAMILY ACC. NUM. COUNI: 1
PATENT INPORMATION:

KIND DATE A 20070215 JP 2005-377814 JP 2005-192046 JP 2007039633 PRIORITY APPLN. INFO.: MARPAT 146:231129 OTHER SOURCE(S):

OTHER SOURCE(S): MAGRET 146:201129

No In marking agents contain solvents and 21 kinds of organic EL fluorescent colorants comprising 5-membered ring compds. having conjugated system and containing 21 kinds of hetero atoms, Se, or B. Objects are marked by graying with the marking agents, and deposited marking agents are detected by irradiating excitation light, thereby inducing light emission from the fluorescent colorants. Thus, an yellow-emitting marking agent contained MeON and an activated eater of oxadiazolopyridine I.

10 305%-50-50

RE: IMC [Industrial manufacture]; RCI [Reactant); TEM [Technical or engineered material use); PREP [Preparation]; RACI [Reactant or reagent]; USES [Uses]

USES (USes)
(marking agents containing organic EL colorants, their detection, and spray devices)
908866-54-6 CAPAUS
(1,2,5)Oxadia-tolo[3,4-c]pyridise-6-carboxylic acid,
4,7-bis(4-methylphenyl)-, 2,5-diono-1-pyrrolidisyl ester (CA INDEX NAME)

FWENGE-SS-TP 0216W-GT-US RE: DMC [Industrial manufacture], TEM (Technical or engineered material use): PMEP (Preparation): CDES (Uses) (marting agents containing organic EL colorants, their detection, and appay

devices|
PM 90886-55-7 (APLUS
CM Ethansulfonic acid, 2-[[(4,7-bis(4-methylpbenyl][1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]amino]- (CA INDEX NAME)

RN 924280-67-1 CAPLUS CN [1,2.510vadis---1 '^

[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, propyl ester (CA INDEX NAME)



SOLAGS-51-5
Ris RIT [Reactant]; RAUT (Reactant or reagent)
(masking agents containing organic EL colorants, their detection, and spray
derices]
908866-53-5 CAPLOS
[1,3,5]Ohandiszolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methylphenyl)- (CA DOEK NAME)



L17 AMSWER 13 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2007:141569 CAPLUS Full-text

DOCUMENT NUMBER: 147:271884 TITLE:

147:2188

Fluorescent conjugates of caseis and ovalbamin with 4,7-diphenyl-1,2,5-onadiazole[3,4-c]pyridize-6-carboxylic acids preparation and analysis Balasa, Minetal Camelia Pipesco, Aignals Department of Organic Chemistry, "Politeinica" Divirersity of Barbarest, Bodharett, 600422, Pon. Revox Pounise de Chimie (2006), 51(7-8), 847-850 OGBH: PROVAN, DISTO (0035-200).

BRITUM Anademici Romane AUTHOR(S): CORPORATE SOURCE:

PUBLISHER:

DOCUMENT TYPE: Journal

AB Fluorescent conjugates are widely used in biol. and medicine. The authors used for this study hen ovalbumin and bovine casein. The conjugation reaction

of proteins with 4,7-diphenyl-1,2,5-oxadiazolo[3,4-c]pyridine-6-cathoxylic acid (CDPCA) was performed with dispulaesylcathodinide (CDC) and N-(hydroxylanleinide (DEM). Fluorescent conjugates were separated by gel chromatog, and organic solvent precipitation Purified fluorescent conjugates were subsequently analyzed by fluorinetry and by sodium domeyl sulfate-polyacrylamice gel electrophoresis (SDC-PDEE). These analyzes showed that the tested conjugation reaction yielded fluorescent conjugates at thiol groups. The strongest emission was obtained with the ovalumina conjugate. The limits of detection by electrophoresis in presence of detergent for both protein conjugates are also recorted. conjugates are also reported. 85721-38-009, 4,7-Diphenyl[1,2,5]oxadiazolo[3,4-c]pyridine-6-

60712-57-109, 4,7-Dipheny[1], 2,5]onadiasolo[3,4-Dypridine-6-carboxylie acid, fluorescent historyingtes Et. NIT (Asalyte); SSU (Siological study, unclassified); PBP (Properties); SSW (Synthetic preparation); NSST (Analytical study); ESGU. (Biological study); PSGU (Epeparation) (preparation of conjugates of casein and ovalbumin with dipheny[1], 25]onadiasolo[3,4-Dypridine-carboxylic acid and study of their fluorescent properties and SIG-PMGE (SIA)—4. (DRUGE SIA)—4. (DRUGE SIA)—4.



II \$272.38-2
EL RCI (Beactant); RRCI (Reactant or reagent)
[greparation of conjugates of casein and ovalbumin with
diphenyl[1,2,5]oxadianolo[3,4-c]pyridimenstromylic acid and study of
thir fluorescent properties and SIS-RRCE)

RST01-38-0 GRUES
UN_3,5]Oxadianolo[3,4-c]pyridime-6-carboxylic acid, 4,7-diphenyl- (CA

INDEX NAME)



14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2007:116984 CAPLUS Full-text DOCUMENT NUMBER: 146:180299

Development of organic electroluminescence dye indicator for biomolecules
Isobe, Shinichiro
Japan
PCT Int. Appl., 94pp.
CCORN.
Japanese
1
1
1 TITLE:

INVENTOR(S): PATENT ASSIGNEE(S):

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| | ENI . | | | | KIN | | DATE | | | APPL | | | | | D | ATE | |
|--------|-------|------|------|-----|-----|-----|------|------|-----|------|------|------|-----------------|-----------------|-----|------|-----|
| | 2007 | | | | | | | | | | | | | | 2 | 0060 | 728 |
| | И: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | AZ, | Βħ, | BB, | BG, | BR, | BW, | BY, | B2, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | C2, | DE, | DK, | DM, | D2, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HN, | HR, | BU, | ID, | IL, | IN, | IS, | JP, | KΕ, | KG, | KM, | KN, | KP, |
| | | KR, | KΣ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN |
| | | MW, | MX, | M2, | NA, | NG, | NI, | NO, | NΣ, | OM, | PG, | PH, | \mathbb{PL}_r | ΡI, | R0, | RS, | RU, |
| | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | IJ, | ΙM, | IN, | IR, | П, | 12, | UA, | UG, |
| | | US, | UΣ, | VC, | VN, | žΑ, | 2M, | 2W | | | | | | | | | |
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| | | IS, | II, | LΓ, | LU, | LV, | ИC, | NL, | PL, | PĪ, | RO, | SE, | SI, | SK, | TR, | BF, | BJ, |
| | | CF, | CG, | CI, | CM, | GA, | GΝ, | GQ, | G₩, | ML, | MR, | NE, | SN, | \mathbb{TD}_r | IG, | B₩, | GH |
| | | GM, | KE, | LS, | MW, | MZ, | M, | SD, | SL, | SZ, | 12, | UG, | ZM, | 24, | λM, | AΣ, | BY, |
| | | KG, | KΣ, | MD, | RU, | IJ, | IΜ | | | | | | | | | | |
| EP | 1932 | 888 | | | Al | | 2008 | 0618 | | EP 2 | 006- | 7819 | 18 | | 2 | 0060 | 728 |
| | R: | λī, | BE, | BG, | CH, | CY, | C٤, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IB, |
| | | IS, | II, | H, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | R0, | SE, | SI, | SK, | TR | |
| IN | 2008 | CNOO | 461 | | Α | | 2008 | 0919 | | IN 2 | -800 | CN46 | 1 | | 2 | 0080 | 128 |
| KR | 2008 | 0381 | 83 | | Α | | 2008 | 0502 | | KR 2 | -800 | 7004 | 688 | | 2 | 0080 | 227 |
| CN | 1012 | 7309 | 6 | | Α | | 2008 | 0924 | | CN 2 | 006- | 8003 | 5218 | | 2 | 0080 | 324 |
| IORITY | APP | DN. | INFO | .: | | | | | | JP 2 | 005- | 2192 | 18 | | A 2 | 0050 | 728 |
| | | | | | | | | | | JP 2 | 006- | 2565 | 8 | | A 2 | 0060 | 202 |
| | | | | | | | | | | WO 2 | 006- | JP31 | 5008 | - | W 2 | 0060 | 728 |
| HER SO | DURCE | (S): | | | MAR | PAT | 146: | 1802 | 99 | | | | | | | | |

AB Azole electroluminescence dye indicators having spacer regions for nucleic acids and proteins have been developed. The EL dyes have general structures I (R1,R4 = H, halo, alkyl, alkenyl, alkoxy, OH, CN, sulfonyl, aromatic, heterocyclic; R2,R3 = R1, thiophene, furan, pyrrole, inidazole, oxazole, neceoveric; No.No. - Nr., Chiopiene, Tutan, Pyfrote, Annasote, Osasote, thisacle, pyracoles, pyridines, sulfonyl aryl; X = M, S, O, Se, B with(out) substitution; Y = CR4, M, N+R'; R' = alkyl, alkyaryl; An - Cl-, Br-, Ir-, CF3SO3-, BF4-, PP6-]. The EL dyes addnl. comprise a spacer region -(CHR'|p-X-

(CRE''|q- [X = NRTOO, COME, COO, SOURE, NRC(CHRINE, O. S, NR, CH-CH, C. CtplandaC, Ar, Co-Ar-NR; R = alkyl; N', R'' = R, alkyl without] aromatic rings and they can contain sulfonyl, OH, quaternary maines, COME; Ar = aryl; p, q = 0 apprax; 29; q = 2 l), mainto-localido sifenyl propancio scid, 2-mainto-localido scid, shonoscerine or scripe. The indicators have reactive moiety for labeling that consist of carboxylic acid, isocymante, isothicoymate, spony, alkyl halides, rissine, or carbodiniante. The indicators can be applied to various bimols. involved in specific binding process they include oliponuclectide probes, nonclection spilification princes or terminators, MR and. Inexcons, proteins (artipens, hapters and antibodies), biotin or avidins, tag peptide, lectin, glycoproteins, hormones and receptors. The systems using electrophoresis are especially Caladaca as the method to detect the indicator-labeled minosis. Syntheses of some specific EL dyes and labeling of oligo DNA and proteins were demonstrated.

\$22.55.-6.59\$

EL 380 (Rahytical study); PSEP (Preparation); USES (Uses)
(as specify development of organic electroluminescence dye indicator for himsels.)

biomols.)

| biomols.) | BN 92193-6-6 CARKUS | CAR

Absolute stereochemistry.

IT 001895-06-90 821035-05-07
RL: RCT (Reactant); SRN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(as spacer; development of organic electroluminescence dye indicator for

biomols.) 921935-05-9 CAPLUS

 $L-{\tt Alanine}, \ {\tt N-[\{4,7-bis\{4-methoxypheny1\}|\{1,2,5\}\}} \ oxadiazolo\{3,4-c\}pyridin-6-y1\}carbonyl\}-L-seryl- \ (CA INDEX NAME)$

Absolute stereochemistry.

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)

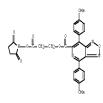
TT \$21,235-02-85 321,535-08-8P \$21,935-89-35 S2133-0-2-6 VESS-0-0-9 S2133-0-9-30
BR: AMG (Amalytical respect use; JSR (Synthetic preparation); AMSI
(Amalytical study); PEBP (Preparation); USSS (Uses)
(development of organic electroluminscence dye indicator for biomals.)
S21935-0-2-6 CAPRUS
L-Allanize, M-(H-/-mis(-develtomypheny))[1,2,5](somadiazolo[3,4-]pyriddin-6-yi](carbony)]-3-sulfo-, 2,5-dioma-1-pyrolidinyl ester (CA HOREE HOME)

Absolute stereochemistry.

RN 921935-04-8 CAPLUS CN L-Sexine. N-118-1-13

L-Serine, N-[(4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)

921935-09-3 CAPUUS [14,25]Okaddasolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-achtyphenyl)-, 3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl acter (CA INDEX NAME)



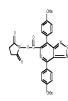
IT #55783-45-45 #55781-83-48 #57883-45-15 53782-57-45 *81553-32-75 #53783-557 53785-53-45-15 *81535-552-55 BL RT (Reactant); SRW (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (development of organic electroluminescence dye indicator for biomols.)

[1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxypbenyl) - (CA INDEX NAME)

855781-84-9 CAPLUS

(CA INDEX NAME)
(1,2,5) Okadianolo(3,4-c) pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



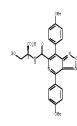
- 857048-00-1 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-his(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

- RN 921934-97-6 CAPLUS
- β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

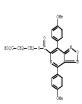
- RN 921934-90-7 CAPLUS
 CN \$-Alanine, N-[[4,7-his(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN 921935-03-7 CAPLOS
 CN L-Serine, N-[[4,7-his(4-methoxyphenyl)(1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl)- (CA INDEX NAME)



- 921935-08-2 CAPLUS
 [1,2,5]Omadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-his(4-methoxyphenyl)-, 2-carboxyethyl ester (CA INDEX NAME)



OS.CITING REP COUNT: 1 THERE ARE 1 CAPAUS RECORDS THAT CITE THIS RECORD (1 CITIMES)

PEFFRENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2007:53499 CAPLUS Fail text DOCUMENT NUMBER: 146:138245

Cell staining method using intercalator fluorescent

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------|----------|-----------------|----------|
| | | | | |
| JP 2007006788 | A | 20070118 | JP 2005-192066 | 20050630 |
| PRIORITY APPLN. INFO.: | | | JP 2005-192066 | 20050630 |
| B 3 31 1 1 1 | 44.00 | 2.4 | 1.7 1 1.3 63 | |

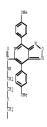
- SSC(5)-SP-12

 MR: NBC (Realytical treagent use); SFM (Synthetic preparation); NMST (Realytical study); PRBP (Preparation); USBS (Uses) (cell staining method using intercelator fluorescent dye)

 MR: SSSN-RS-0 CAPUUS

 (1.2,5) Oscillation Jol (3,4-c)pyridine-6-carboxanide,

 N,N'-[9,10-anthracemediylnis (methylene (oxy-2,1-ethanediyl)]) his (4,7-bis (4-methoxyphenyl) (CA INUEN NAME)



PAGE 2-A

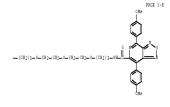
PAGE 3-A Į,

- - CH 1

 - CRN 880134-73-6 CMF C54 H61 N7 O14

PAGE 1-A





CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN &80134-15-8 CAPLUS
CN [1,2,5]Omadiarolo[3,4-c]pyridine-6-carboxamide,
NN*-[(1,3,6,8-tet-tapque-1,3,6,8-tet-tapoxameno[lim][3,8]phenanthroline2,7-cityl)sis (3,1-propaneliny)ncy2,1-ethanediyloxy-2,1-ethanediyloxy-3,1propanediyl]bis[4,7-his(4-methoxybenyl)- (CA INDEX NAME)

PAGE 1-B

$$- \bigvee_{i=0}^{n} (-2i)_{i=0} (-$$

RN 896447-93-1 CAPLUS

comput-75-1 ...neuso [1,4-c]pyridine-6-carboxanide, [1,2,5]bxadia (ol[0,4-c]pyridine-6-carboxanide, 4,7-bis(4-methoxypbenyl)-N-[2-[(10-[(2-(methylanino)ethoxy]methyl)-9-anthracenyl]methoxy]ethyl]-, 2,2,2-trifluoroacetate (1:1) [CA INDEX NAME]

CRN 896447-92-0 CMF C41 H39 N5 O6

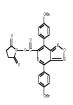
PAGE 2-A

PAGE 1-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

\$6557k;5:s-2 Bir SCI [Reactant]; RMCI (Reactant or reagent) (cell staining method using intercalator fluorescent dye) 8557kl-84-9 (ARUUS [1,5]SDmailso(),4-c]pyridine-6-carboxylic acid, 4,7-his(4-methoxypbenyl-, 2,5-diono-1-pyrrolidinyl ester (CA INKEX NAME)



L17 AMSWER 16 OF 29 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: DOCUMENT NUMBER:

2006:913730 CAPLUS <u>Full-text</u> 145:309967

Protein detection method using fluorescent dye Isobe, Shinichiro; Waki, Michinori TITLE: INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

Japan Jpn. Kokai Tokkyo Koho, 36pp. CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE: J FAMILY ACC. NUM. COUNT: 1

| PATENT NO. | | | | | KIND DATE | | | | APPL | ICAT | DATE | | | | | | | | | | |
|---------------|----|-----|-----|-----|-------------|------------|-----|-----|------|------------------|------|----------|-----|-----|-----|-----|----------|--|--|--|--|
| | | | | | | - | | | | | | | | | | | | | | | |
| JP 2006234772 | | | | | | A 20060907 | | | | JP 2 | 005- | 20050228 | | | | | | | | | |
| WO 2008018129 | | | | | A1 20080214 | | | | | WO 2006-JP315751 | | | | | | | 20060809 | | | | |
| | И: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | Βž, | CA, | CH, | | | | |
| | | CN, | CO, | CR, | CU, | C2, | DE, | DK, | DM, | DZ, | EC, | BB, | EG, | ES, | FI, | GB, | GD, | | | | |
| | | GE, | GH, | GM, | BN, | HR, | BU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | ĸN, | KP, | | | | |
| | | KR, | K2, | LA, | LC, | LK, | LR, | LS, | Lī, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MI, | | | | |
| | | MW, | MX, | MZ, | NA, | NG, | NI, | NO, | NΣ, | OM, | PG, | PH, | PL, | PI, | RO, | RS, | RU, | | | | |
| | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | IJ, | IM, | TN, | IR, | II, | Τž, | UA, | UG, | | | | |
| | | US, | UZ, | VC, | VN, | ٤à, | 2M, | 214 | | | | | | | | | | | | | |
| | RW | ΑĪ, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IB, | | | | |
| | | IS. | II. | LT. | LU. | LV. | MC. | NL. | PL. | PI. | RO. | SE. | SI. | SK. | TR. | BF. | BJ. | | | | |

CF, OG, CT, CM, GA, GM, GQ, GM, ME, MR, NB, SM, TD, TG, BM, GB, GM, KE, LS, MM, ME, NB, SD, SE, TE, OG, DM, CM, MA, AE, ST, NG, NE, MD, NB, TT, TM

PRIORITY APPEN. INFO:

NB A protein detection method is provided, which enables to perform a high sensitivity protein detection on with a convenient operation. In this protein detection method, a protein labeled with a fluorescent day (e.g., azionic fluorescent day) is detected. The nethod corprises detecting a protein by measuring fluorescence days as second fluorescence wavelength observed in a state where the fluorescence days is bound to the protein, which is shorter than a first fluorescence wavelength observed in a state where the fluorescence wavelength observed in the state wave

method. 500266-55-19 II

PROCOS NO. (# 1875) (FRED (Peparation); MNST (Analytical reagent use); SRW (Synthetic preparation); MNST (Analytical study); PREP (Peparation); USSS (Uses) (protein detection method using fluorescent dye) 908866-55-7 CAP

Subsoc-35-1 CAPAGE
Ethanesulfonic acid, 2-[[[4,7-bis(4-methylphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]amino]- (CA INDEX NAME)

SQZXXX-73-5 FR: RCI (Reactant); RACI (Reactant or reagent) (protein detection method using fluoreacent dye) 908866-3-3-5 CRPUDS [1,5,5]Oxadia-01(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)- (CA INDEX NAME)



598266-54-6P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(protein detection method using fluorescent dye)
908066-54-6 CAPLUS
[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid,

4,7-bis(4-methylphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

LL? ANSWER 17 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER:

MARUS COPYRIGHT 2011 ACS on STN
2006.699209 ADRUS Full-text
145.97428
Development of fluorescent dsUM-intercalating
reagents for the application to gene detection
Laobe, Shinichiro

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

Japan Jpn. Kokai Tokkyo Koho, 35 pp.

DOCUMENT TYPE:

LANGUAGE: Ja FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

CODEN: JKKKAF Patent Japanese

PATENT NO. KIND DATE APPLICATION NO. DATE 20060713 JP 2004-380646 20041228 JP 2006180835 US 20080101176 A1 20080501 US 2007-794228 20070626 PRIORITY APPLN. INFO.: JP 2004-380646 A 20041228 WO 2005-JP19292 W 20051020

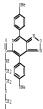
ASSIGNMENT HISTORY FOR US PRIBLY AVAILABLE IN LOUS DISPLAY FORMAT

AB Novel fluorescent desUR-intercalating respents based on organic EL dye for the
application to gene detection have been developed. The intercalating respent
agenerates fluorescence with shorter wavelength at the intercalating state than
that at free state. An assay system on a microarray set-up has been developed
for the application of the intercalating assay to gene detection. Sample
datUR solution is mixed with the solution containing the intercalating respent
and the reaction mixts. are spotted on the assay media substrate for
determining the fluorescent intensities. In Graguic EL dyes have condensed
ring structures consisted of 5- (containing better atoms such as Se or B,
asoles or infidences in Greenbeerd ring oraclasing computed double books. ring structures consisted of 5- (containing better atoms such as Se or B, asales or inidiateles) or Semberder dring containing conjugated double bonds. The binding regions of the dyes are single or multi atomatic rings such as anthraceas, phenathraces, purpers, fluorese, highesylaes, naphthalaes (dinides and mindes) or phenyldinind groups. A maphthalaes dimide intercalater and an anthraceae intercalater were synthesized and their spectrometric properties as DMA-intercalating reagents were studied. Peptidic intercalater containing the organic SE ogs was also prepared (PSI) 4-(2)-0 (SAC)-45-10-10 (PSI) (PSI) (Peptidic) (PSI) (Peptidic) (PSI) (PSI)

application to gene detection) RN 855781-85-0 CAPLUS

[1,2,5] Oxadiazolo [3,4-c] pyridine-6-carboxamide, [1,2,5] Oxadiazolo [3,4-c] pyridine-6-carboxamide, [1,1] Dissipation [4,7-bis(4-methoxyphenyl)] [1,7-bis(4-methoxyphenyl)] [2,1] USEN [0MM8]

PAGE 1-A

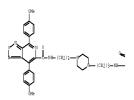


PAGE 1-C

PAGE 3-A

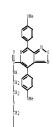
896447-86-2 CAPLUS

[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxamide, N, N = [(1, 3, 6, 8-tetrahydro-1, 3, 6, 8-tetrahydro-1]mn] [3, 8]phenanthrolin-2, 7-diy| bis(min-3,1-propaned)yl-4,1-piperasinediyl-3,1-propanediyl) bis[4, 7-bis(4-nethoxypbenyl)- (9CI) (CA INDEX NAME)



896447-99-1 CAPRUS [14,25] Okadia nolo [3,4-c) pyridine-6-carboxanide, [4,7-in4] (*-a-boxpheny) -19-[2-[[10-[[2-(methylanino) ethoxy]methyl]-9-anthracenyl]methoxy]ethyl]-, 2,2,2-trifluoroacetate (1:1] (CA INDEX NAME)

CRN 896447-92-0 CMF C41 H39 N5 O6



PAGE 1-A

PAGE 2-A

CRN 76-05-1 CMF C2 H F3 O2

Signay-2-5 BR: SCI (Rescatant); RMCI (Reactant or reagent) (development of floorsecent dsDR-intercalating reagents for spilosation to gene detection) 885 Mai-8-8 CARDUS (1, 2,5)Comains(0,4-e)Cyptimin-ef-carboxylic acid, 4,7-mis(4-methoxypboxyl)- (CA INDEX (BME)



805/21-64-9P RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent)
(development of fluorescent dsDNA-intercalating reagents for

application to gene detection) 855781-84-9 CAPLUS

633:61-64-5 (APAGE)
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

LIT AMSWEP 18 OF 29 CAPLUS COPYRIGHT 2011 ACS on SIN
ACCESSION MOMERS:
100MENT MOMERS:
11TLE:

50(9-10), 851-854 CODEN: RRCHAX; ISSN: 0035-3930

PUBLISHER: Editura Academiei Romane DOCUMENT TYPE: LANGUAGE:

PROMES: Eeglish
Protein tyroxine phosphatases (PTP) are regulatory proteins that play an important role in cell signaling processes. They exert their regulatory action in conjunction with protein tyroxine kinases keeping under strict control the phosphorylation level of specific signaling proteins. PTP-SU (PTP STEP Like) has an major role in the activity modulation and transdocation of extracellular signal regulates kinase (EMPC). In interaction between PTP-SU and EMPC involves kinase interaction motif (KUM) situated at the M-terminas of the PTP-SC catalyzic domain. We report here the results of our study concerning the inhibitory effect of 4, 1-diphenyl-1,2,5-canadiazolog,4-clpyridine-6-carboxylic acid (UCPCA) on PTP-SI activity. To this purpose three PTP-SI forms were expressed and purified. Using p-nitophenylphosphate (SMPP) as substrate, the PTP-SI forms displayed decreased activities to increased concepts, of DODCA in the rames 5-200 MR. increased concns. of DOPCA in the range 5-200 μM.

Journal

English

2733-2-2-7

RI SBU (Biological study, unclassified); BEUC (Biological study)
(DOCA); effect of 4,7-di-Rp-1,2.5-coadissolo[3,4-c)pyridine-6carboxylic acid on protein tyrosine phosphatase-al activity)
85131-38-1 CAPLUS
(1,2,5)Docadisolo[3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl- (CA
INDEX (DME)



13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 AMSWER 19 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:269311 CAPLUS Fall-text

DOCUMENT NUMBER: 144:325826 Development of double stranded DNA intercalating TITLE: organic electroluminescence probe for gene detection

assay Isobe, Shinichiro INVENTOR (S): PATENT ASSIGNEE(S): SOURCE:

Japan
PCT Int. Appl., 52 pp.
CODEN: PIXXD2
Patent
Japanese DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 20060301088 AL 20060323 NO 2005-7F15647 20050913 N: AR, AG, AL, AM, AT, AU, AT, AR, BB, BG, BR, BH, BY, BL, CA, CU, CO, CR, CC, CG, BG, BH, BY, BR, CA, CR, CG, GR, GH, GH, HH, HU, ID, IL, IM, IS, JP, KE, KG, BM, KP, KR, KE, LC, LK, LR, LS, LT, LU, LV, MA, MC, MA, KR, MA, MA WO 2006030788

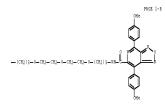
state. II 000024-70-70 880130-75-89 000024-78-80 220154-72-09

SCULSA': PC'S RE: ABG (Ranlytical reagent use); SPN (Synthetic preparation); ANSI (Analytical study); PEPP (Preparation); USES (Uses) (development of double stranded URA intercalating organic electroluminascence probe for gene detection assay)

CRN 880134-73-6 CMF C54 H61 N7 O14

PAGE 1-A





CM 2

CPN 76-05-1 CMF C2 H F3 02

PN 880134-15-8 CAPLUS
CN [1,2,5]Oxadianolo[3,4-c]pyridine-6-carboxamide,
N,W" [1,3,6]e-textraydro-1,3,6,6-textraondenso[lam][3,8]phenasthroline2,1-diyl)his.6,1-propasediylovy-2,1-ethanediylovy-2,1-ethanediylovy-3,1proparediyl]|bis[4,7-bis[4-methoxyphenyl]|- (CA INDEN NOME)

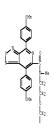
NE (CE2)3_0_CE2_CE2_0_CE2_CE2_CE3_0_(CE2)3____

PAGE 1-B

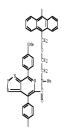
CH2)3_0_CH2_CH2_CH2_CH2_CH2_O_(CH2)3_WH_U

PAGE 1-C

RM 880134-76-9 CAPUIO, (4-c)gyridise-6-carboxanide, N.M.*(-9). Inathracenediylhi (setbyleneoxy-2,1-ethanediyl)) bis [4,7-his (4-nethoxyphenyl)]-M-nethyl- (9CI) (CA INDER UNME)



PAGE 2-A



PAGE 3-A

880134-78-1 CAPLUS
[1,2,5]Oxadiaxolo[3,4-c]pyridine-6-carboxanide,
4,7-his (4-methoxyphenyl)-M-methyl-14-[2-[(10-[(2-(nethylamino-1exbynghenyl)-shrinaenyl)-phethoxylethyl)-2,2,2-trifluoroacetate [1:1] (CA INDEX NOME)

Į,,

CM 1

CRN 880134-77-0 CMF C42 H41 N5 06

PAGE 1-A

PAGE 2-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

II SES'NS-28-55

Ri: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); PRCI (Reactant or reagent) (development of double stranded UNA intercalating organic electroluminescence probe for gene detection assay)

85578-84-9 CAPLUS

CN [1,2,5] Sunadiazolo (3,4-c) pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L17 AMSWER 20 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2005:1026011 CAPLUS Full-text 143:335872 DOCUMENT NUMBER:

TITLE: INVENTOR (S):

143:335872

Organic romlinear optical material

Matapa, Suntarco, Timisean, Diser, Ishii, Isutomu;

Kato, Shinichiro; Goromaru, Rideki; Shiqeiwa,

Boriyuti; Mesda, Smuichi

Hitsubiani Chemacal Corp., Japan

Jpn. Rokai Tokkyo Roho, 28 pp.

COSN: JOGGAP

Patent

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: J FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: Japanese

> PATENT NO. KIND DATE APPLICATION NO. DATE A 20050922 B2 20100714 JP 2005258388 JP 4501588 JP 2004-239729 20040819

JP 2003-404725 A 20031203 JP 2004-32223 A 20040209 PRIORITY APPLN. INFO.:

PRIORITY APPLN. INFO.: JP 2003-404725 A 20031203
JP 2004-32223 A 20040209
OIMER SCONCE(5): MARPAT 143:335872
AB The invention relates to an organic nonlinear optical naterial, characterized by a large two-photon absorption cross section, and a large Stokes shift, and represented by Railpa-Rai-(Railm (Rail — divalent heterocyclic group; Ar2 and Ar2 — betworcyclics and aromatic informations; and an and — 144 integers].
IN 68/501-17-10 (Organic modinear optical material)
IN 68/501-17-1 (ARUS)
(1.1.2) Singed and (1.1.2) (Organic modinear optical material)
IN 68/501-17-1 (ARUS)
(1.1.2) Singed anolog(3.4-c) prioritine-6-carboxylic acid,
4,7-mis(1),1'-biphenyl)-4-yl-, ethyl ester (CA INDEX NAME)

865091-73-2 CAPLUS [1,2,5]0xadiazolo(3,4-c]pyridine-6-carboxylic acid, 4,7-bis(5-phenyl-2-thienyl)- (CA INDEX NAME)



L17 AMSWER 21 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER:

2005:589313 CAPLUS <u>Full-test</u>
143:93575
Method for detecting biomolecule using labeling dye or TITLE:

labeling kit

Isobe, Shinichiro Mataka, Shuntaro, Japan; Takenaka, Shigeori PCT Ent. Appl., 67 pp. COERN: PIXXIO Patent Japanese INVENIOR(S): PATENT ASSIGNEE(S):

SOURCE: DOCUMENT TYPE:

LANGUAGE: J.
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PA1 | ENI | NO. | | | KIN | | DATE | | | | ICAI | | | | | ATE | |
|-----|------|-------|------|-----|-----|-----|------|------|-----|------|-------|-------|--------|-----|------|-------|-----|
| WO | 2003 | 0620 | 46 | | | | 2005 | 0707 | | | | | | | | 0841 | 222 |
| | ₩: | AΞ, | AG, | AL, | AM, | AΓ, | AU, | AΣ, | BA, | BB, | BG, | BR, | B₩, | BY, | BΣ, | CA, | CH |
| | | CN, | CO, | CR, | CU, | C2, | DE, | DK, | DΜ, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GE |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KΣ, | LC |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | М, | MX, | MΣ, | NA, | NI |
| | | NO, | NΣ, | OM, | PG, | PH, | PL, | ΡĪ, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY |
| | | | | | | | Τž, | | | | | | | | | | |
| | RM | B₩, | GH, | GM, | KE, | LS, | М, | MΣ, | NA, | SD, | SL, | \$2, | IZ, | UG, | 214, | ΣW, | AM |
| | | | | | | | RU, | | | | | | | | | | |
| | | EE, | ES, | FI, | FR, | GB, | GR, | ΗU, | IE, | IS, | ΙΓ, | LT, | LU, | MC, | NL, | PL, | PI |
| | | RO, | SE, | SI, | SK, | TR, | BF, | BJ, | CF, | CG, | CI, | CM, | GA_r | ŒV, | GQ, | G₩, | ML |
| | | | | | TD, | | | | | | | | | | | | |
| | | 52080 | | | | | | | | JP 2 | 2004- | 1051 | 87 | | 2 | 0040 | 331 |
| | | 1667 | | | | | | | | | | | | | | | |
| | | 50181 | | | | | | | | US 2 | 004- | 8227 | 75 | | 2 | 0040 | 413 |
| | | 5002 | | | | | | | | | | | | | | | |
| | | 911 | | | | | | 1018 | | EP 2 | 004- | 8075 | 72 | | 2 | 0041 | 222 |
| | | λī, | | | | | | | | | | | | | | | |
| | | 490 | | | | | | | | | | | | | | | |
| IN | 2006 | CN 02 | 338 | | λ | | 2007 | 0706 | | IN 2 | 006- | CN23. | 38 | | 2 | 0060 | |
| | | 70038 | | | | | | | | | | | | | | | |
| | | 0154 | | | | | | | | US 2 | 006- | 5840 | 89 | | 2 | 0060 | 809 |
| | | 2555 | | | B2 | | 2010 | 0216 | | | | | | | | | |
| IT | API | W. | INFO | .: | | | | | | | 2003- | | | | | | |
| | | | | | | | | | | | 004- | | | | | | |
| | | ISTO | | | | | | | | | 004- | | | | | QU 41 | 222 |

A method for detecting a bicmol. is provided, in which a bicpolymer is react with an organic EL (electroluminescent) dye, and the fluorescence of the biopolymer sample labeled with the organic EL dye is measured. By using an organic EL dye as a labeling dye, a biopolymer can be detected with higher sensitivity at lower cost.

IΓ

SCING-V2-CF

RE: ABG (Nanhytical reagent use); SPM (Symthetic preparation); MISI
(Reallytical study); PESP (Preparation); USES (Uses)
(method for detecting himsol. using electroluminescent labeling dye)
855781-24-9 CARUS
[1, 2,5]Ondailsol(3,4-c)pyridines-6-craboxylic acid,
4,7-his(4-methoxyphenyl)-, 2,5-diono-1-pyrrolidinyl ester (CA INIEK NAME)

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent)
(method for detecting biomol. using electroluminescent labeling dye)

(Retror Los Getectang Manager - Mana

857048-00-1 CAPLUS

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(7 CITINGS)
20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 22 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN L17 ANSWER 22 OF 29
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE: PRUSS COMPRISENT 2011 ACS on STN
2005:589130 CAPPLUS Full-teet
133:68428
Single-layer organic el device
Inobe, Shininchiro
Mataka, Shuntaro, Japan; Tatenaka, Shigeori
PCT Int. Repl., 26 pp.
COGEN: PRUMC2
Patent

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE | MAIST | MAIS US 20070116981 PRIORITY APPLN. INFO.:

CN 2004-80038650 A3 20041222 W 20041222

 $$\tt WO~2004-JP19211 \tt W$$ ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

DISMONT HISTORY FOR US PATENT AVAILABLE IN LISTS DISPORAT FORMAT
Disclosed is an organic Ed dye enabling to provide an organic Ed device which
is copable of entiting a light at a low voltage ence when it has a singlelayer structure. Also disclosed is an organic Ed device using such an organic
Ed dye. The organic Ed dye is represented by the operat formula: IC+1) Dis
where x is an n-walest charge-transporting group. T is a light-emitting group
E is a linking group bonding the charge-transporting group and the lightemitting group, and a and na reap. an integer not less than 1.
2005/12.6-19 507/24.7-10.7
EN EDV [Device component use]: SPM [Symthetic preparation]: PREP
[Preparation]: USBS [Uses]
[isingl-layer organic el device)
855/21.8-5-0 CAPUMS
[1, 2,5] Okadiasole[3, 4-C]pridine-6-carboxanide,
[M. 7-1] Okadiasole[3, 4-C] pridine-6-carboxanide,
[M. 7-1] Okadiasole[3, 4-C] pridine-6-carboxanide,
[M. 7-1] Okadiasole[3, 4-C] pridine-6-carboxanide,
[M. 7-1] SPM [M. 7-bis (4-

N,N'-[9,10-anthracenediy1)]]his[4,7-bis(4-methoxpheny1)- (CA INDEX NAME)

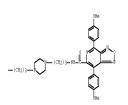
PAGE 1-A

PAGE 2-A

PAGE 3-A

855181-87-2 CARUNS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxamide,
N,N'=[1,3,6]E-tetrabydro-1,3,6,8-tetrabydrobeno[lmn][3,8]phenashtroline2,7-diyl) bis 3,7-propasediy-1,9-tipyrarisedyl-3,1-propasediy|1]bis [4,7-his(4-methoxypbenyl)-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

E-55- (2003 TI

RL: RCI (Reactant): RACI (Reactant or reagent)

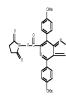
(single-layer organic el device)

855781-83-8 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl) - (CA INDEX NAME)



SSS 2CL-30-479
RE: PCT (Reactant); SPM (Synthetic preparation); PREP (Preparation); RACT (Reactant or respect) (single-layer organic el device) 885781-84-5 (RACUS 11, 2,5)Contain-10d, 4-el pyridinie-6-carboxylic acid, 4,7-his(4-methoxyphenyl)-, 2,5-diomo-1-pyrrolidisyl ester (CA INDEX NOME)



23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 23 OF 29 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER 2004:883110 CAPLUS <u>Full-text</u> 142:280019 DOCUMENT NUMBER:

TITLE:

142:280019 Synthesis and biological application of a new 1,2,5-oxadiazolo[3,4-c]pyridine moiety fluorescent

marker Balasu, Mihaela C.; Costea, Ion; Fratila, Raluca; Popescu, Angela; Draghici, Constantin; Szedlacsek, Stefan E.

Department of Organic Chemistry, "Politehnica" University, Bucharest, 060042, Rom. CORPORATE SOURCE:

Revue Roumaine de Chimie (2004), 49(3-4), 309-315 SOURCE:

CODEN: RRCHAX; ISSN: 0035-3930 PUBLISHER: Editura Academiei Romane

DOCUMENT TYPE: LANGUAGE: English OTHER SOURCE(S):

IT RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

(Biological study) (synthesis and evaluation of a new 1,2,5-oxadiazolo[3,4-c]pyridine

bioconjugate fluorescent marker) 85731-38-0 CAPLUS

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl- (CA RODEX NOME)

NATIONAL-US RL: BSU (Biological study, unclassified); PRP (Properties); RCI (Beattant); SRI (Synthetic preparation); BLG (Biological study); PREP (Preparation); RCI (Beattan to respect) (synthesis and evaluation of a rew 1, 2,5-oxadiazolo[3,4-c]pyridire

bioconjugate fluorescent marker) 847203-15-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



RL: RCI (Reactant): RACI (Reactant or reagent)

Ri: ST (Reactant); RMCT (Reactant or reagent) (synthesis and evaluation of a rew. 1,2,5-oxandiazolo[3,4-c]pyridine bioconjugate floorescent marker) 85731-38-1 (DMUS (1,2,5]Oxandiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA NDEN NOME)



%?(30-7-50)
RE: RCI [Reactant]: SRM [Synthetic preparation]: PREP [Preparation]: RACI [Reactant or reagent] [asynthesis and evaluation of a new 1, 2,5-oxadiazolo[3,4-c]pyridine histoconjugate [Inorescent natker]
%?(203-13-8 CARUS [12,5]) Cardiad and [3,4-c]pyridine-6-carbonyl chloride, 4,1-diphenyl- (CA NUDEX NUME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER 2004:204620 CAPLUS <u>Full-text</u> DOCUMENT NUMBER: 141:424128 TITLE:

141:62128
Product class 7: 1,2,5-onadiazoles
Paton, R. M.
Department of Chemistry, University of Edinburgh,
Edinburgh, EH9 3JJ, UK
Science of Synthesis (2004), 13, 185-218
COERS: SSCU39
COERS: SSCU39
COERS: SSCU39 CORPORATE SOURCE:

PUBLISHER: DOCUMENT TYPE: Georg Thieme Verlag Journal; General Review

LANGUAGE: English

unemonorate: BSGJ.SR AB A review. Methods for preparing 1,2,5-oxadiazoles are reviewed including cyclization, ring transformation, and substituent modification. II 20078-02-09

20375-7-0-0
Mi. SPN (Synthetic preparation); PRSP (Preparation)
(preparation of oxadiacoles via cyclisation, ring transformation, and
substituent modification)
22595-70-0-0-CAPUS
(1, 2, 5) Oxadiacolo (3, 4-c) pyridine-6-carboxylic acid,
4, 7-his (4-chlorophemyl)-, ethyl ester (CA IDDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

225 THERE ARE 225 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L17 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2002:70704 CAPLUS <u>Pull-text</u> DOCUMENT NUMBER: 136:355194

TITLE:

136:55319

Preparation of
4,7-dihetary1-1,2,5-oxadiszolo(3,4-c)pyridines as red
fluorescent materials
Gordnaru, Michely Inlenano, Inles; Sawada, Jauyoshi;
Jakahashi, Kasufumi; Nishi-i, Katsumi; Ochi, Naoko;
Kosugi, Yoshio, Mataka, Shuntar
Graduate School of Engineering Sciences, Kyushu
University, Masuga, 816-6500, Jagan
Reterocycles (2021, 561-2), 241-351
CORRN: RICYRM; ISSN: 0385-5414
Japan Institute of Reterocyclic Chemistry AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

Japan Institute of Heterocyclic Chemistry PUBLISHER: DOCUMENT TYPE:

LANGUAGE: English CASREACT 136:355194

OTHER SOURCE(S):

1,2,5-Oxadiaxolo[3,4-c]pyridines (I; Ar = some or all of 2-thienyl, 2-furanyl, 3-thienyl, 3-brano[e]thienyl, 3-exthyl-2-thienyl, 5-wrono-2-thienyl, 2,5-dinethyl-3-thienyl; ≥ cynno (6), COZE (?), Ph (8), all (10)) were prepared, in quest of a red fluorescent material useful in OXEO devices. These compds. emit fluorescence of orange to red color in solution and in the solid state. 6-Cyano derivs, (6) show a higher quartum yield than the corresponding extens (?), the Ph derivative (8), and the unsubstituted compound (10). Ped EL light at $\lambda = 680$ nm was obtained in an OLED device when Et

4,7-bis(5-phenylthien-2-yl|-1,2,5-oxadiazolo(3,4-c)pyridine-6-carboxylate was used as a dopant emitter. The crystal and mol. structures of 4,7-bis(2-thieny1)-6-cyano-1,2,5-oxadiazolo(3,4-c)pyridine were determined by x-ray

thismyl-6-cyano-1,2,5-oxadiazolo(3,4-c)pyridine were determined by n-ray crystallog.
NSSN-5-7, Ethyl 4,7-diphenyl-1,2,5-oxadiazolo(3,4-c)pyridine-6-carboxylate
R: MP (Proporties)
(comparison; heterosyl-substituted oxadiazolopyridines as red
filuorescent substances)
NSSN-55-5 ORPUS
(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INGEN NAME)

II N1:55-11-57, 4,7-Bis(2-thienyl)-1,2,5-oxadiazolo(3,4-c)pyridine-6-carboxylic acid
R: RT (Reactant): SNN (Synthetic preparation): PREP (Preparation): PREP (Seatant or reagent)
(preparation and thermal decarboxylation of)
RN 42:55-11-5 CAPRUS
(1,2,5)Revision(s): 4-comparation for the state of the state

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-di-2-thienyl- (CA

IT 421555-29-59, Bthyl 4,7-bis(2-thienyl)-1,2,5-oxadiazolo[3,4-

Glissis-20-85, Ettyl 4, 7-bis/(Ethieryl)-1, 2, 5-coadisolo [3, 4-c)pyridine-6-cathoxylate
Bir RPP [Properties]; RCI [Reactant]; SPR (Synthetic preparation); PREP (Preparation); RCI (Reactant); respection as red fluorescent substance and base hydrolysis of) 421555-29-5 (ARUDS [1,2,5]Docadisol(3,4-c)pyridine-6-carboxylic acid, 4,1-di-2-thienyl-, ethyl ester (CA DUEE NAME)

IT 501850-39-20, Ethyl 4,7-bis(S-phenylthien-2-yl)-1,2,5oxadiazolo(3,4-c)pyridine-6-carboxylate RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation as red fluorescent substance and use as dopant emitter in organic

LED)

RN 421555-34-2 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(5-phenyl-2-thienyl)-, ethyl ester (CA INDEX NAME)

IT 421550-32-00, Ethyl 4,7-bis(S-bromothien-2-yl)-1,2,5-420555-32-0 Stupl 4, Pubis(S-bromothien-2-yl)-1,2,5candiazolo[3,4-c]pyridine-6-carboxylate

Bi FFR [Properties]: RCI [Reschant]: SFM [Synthetic preparation]: FFRE
[Preparation]: RCII [Reschant] or reagent)
[preparation as red flowrescent substance, Sucuki coupling with
phenylbronic acid and setathesis with cuprous cyanide)
421555-32-0 CARLOS
[1],5]Okadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(5-bromo-2-thienyl)-, ethyl ester (CA INDEX NAME)



II M1055-W-2P, Ettpl 4, 7-bis [2-fury]]-1, 2,5-omadia alo[3,4-c)pyridine-6-carboxylate 43155-31-59, Ettpl
4,7-bis (5-outly)thin-2-y1)-1, 2,5-omadia alo[3,4-c)pyridine-6-carboxylate
4(3555-1-32), Ettpl 4,7-bis (2,5-dimethylthine-3-y1)-1, 2,5omadia alo[3,4-c)pyridine-6-carboxylate
4(1555-35-36, Ettpl
4,7-bis (5-yeothine-2-y1)-1,2,5-omadia alo[4,4-c)pyridine-6-carboxylate
EL: EMP (Proporties): SMP (Synthetic preparation); PEEP (Preparation)
(preparation of heteroxyl-substituted oxadia:ologyridines as red
fluorescent substances)

- 421555-30-8 CAPLUS
- [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-di-2-furanyl-, ethyl ester (CA INDEX NAME)



421555-31-9 CAPLUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-his(5-methyl-2-thienyl)-, ethyl ester (CA INDEX NRME)



421555-33-1 CAPAUS
[1,2,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(2,5-dinethyl-3-thienyl)-, ethyl ester (CA INDEX NAME)



RN 421555-35-3 CAPLUS

CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-his(5-cyano-2-thienyl|-, ethyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (11 CITINGS)

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L17 ANSWER 26 0F 29 CAPLOS COPPRIGHT 2011 ACS on STN
ACCESSION MOMBER: 1999:241402 CAPLOS <u>Fuil-text</u>
100CMSHIT MINGER: 131:653
IITIG: 10-Bydrosy-7-arylindeno[1,2-b]-1,2,3-oxadiazolo[3,4-

djyrridines and 1-aryl-10-excindence [1,2-b]-1, 2,5-exadiarolo[3,4-d]pyridines - synthesis, spectra, and polymorphism Mataka, Shundaro; Gorohnaro, Rideki; Thienann, Thies; Sawada, Isuyoshi; Takahashi, Kazufumi; Tori-i, AUTHOR(S):

Akivoshi

Institute of Advanced Material Study, Graduate School CORPORATE SOURCE:

SOURCE:

Akiyashi

ARPORTE SOUNCE: Institute of Advanced Material Study, Graduate School of Engineering Gionecs, Fyzaba University, Kassaya, 816-8580, Japan

BRES: Heterocycles (1899), 90(2), 395-902

COMEN: BITCHY, ESSN (088-5014

BLISSER: Japan Institute of Reterocyclic Chemistry

Journal

MUNIOS: Equint

Journal

MUNIOS: Equint

Journal

Journal

MUNIOS: Equint

Journal

Jour

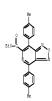
(intermediate; preparation, fluorescence and crystal polymorphism of

indenooxadiazolopyridine dyes) PN 225795-70-0 CAPLUS

CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



225795-71-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)



II %:55:55.4, 4,7-Dipherg1-6-(ethoxycarborg1)-1,2,5-oxadiazolo[3,4-c)pyridise
EL: RCI [Reactant]: RACI (Reactant or reagent)
(statting material; preparation, fluorescence and crystal polymorphism of

indemonatia sologyridine dyes)

NN 16593-55-0 CMPUSS

(1,2,5)Sadia solo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INDEX NAME)



OS.CITING REP COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 12 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMA

L17 ANSWER 27 OF 29 CAPLOS COPYRIGHT 2011 ACS on STN
ACCESSION MOMERS:
100:11544 CAPRUS Fell-text
100:11654 INFORMATION Fell-text
100:11655 Synthesis of 5-46exycovlylenol derivatives carrying a
floorsecent chromophore
AUTHOR(S):
Li, Feng; Kato, Mobios; Gorohmaru, Hideki; Mataka,

Shuntaro; Mori, Akira; Takeshita, Hitoshi Tohwa Institute for Orient Studies, Tohwa University, CORPORATE SOURCE:

Japan SOURCE:

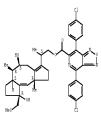
Japan Kyushu Daigaku Kino Busshitsu Kagaku Kenkyusho Hokoku (1998), 12(2), 125-130 CODEN: KDERFS; ISSM: 0914-3793 Kyushu Daigaku Kino Busshitsu Kagaku Kenkyusho

PUBLISHER:

DOCUMENT TYPE: LANGUAGE:

- The structure-activity relationships of cotylenol, a plant-growth regulating diterpencied, 9-deoxypotylenol was found to retain the hiol, activities. The synthesis of 9-deoxypotylenol derive, carrying a floorescent chromophore from the result of the resu

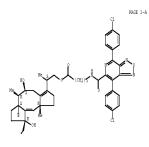
Absolute stereochemistry.



RN 224430-72-2 CAPLUS

The Property of the State of th

Absolute stereochemistry



PAGE 2-A

II %2732-38-8 234859-73-5

RL: RCT (Reactant); RMCT (Reactant or reagent)
(preparation of fluorescent chromophore derive, of 9-decayos/plenol)
RM 82731-38-0 CMPLS

CM (1,2,5)0maniazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diptenyl- (CA [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA INDEX NAME)

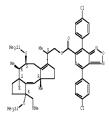
224430-73-3 CAPLUS
[1,2,5] Oxadiazolo(3,4-c] pyridine-6-carboxylic acid,
4,7-bis(4-chlorophenyl)- (CA INDEX NAME)



RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI

Ri: ECI (Rectant): SPN (Synthetic preparation); PREP (Preparation); PRCT (Rectant or reagent) (preparation of floorescent chromophore derivs. of 9-deoxyodylenol) 224491-85-3 (ARMS (1,5)Bondaio(5)4-c)pyridine-6-carboxylic acid, 4,7-bis(4-chlorophoryl)-, (25)-2-(15,50,60.5,90,100)-1,2,4,5,5,6,7,8,9,100-deoxyhyic-9-(methoxynethyl)-5,10n-disethyl-5,9-bis((trinethylsilyl)oxy)dicyclopenta(a,d)cyclooten-3-yl[propyl ester (CA NDEX NDME)

Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

1 HERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REPERENCE COUNT.

LI7 AMSWER 28 OF 29 CAPLIS COPYRIGHT 2011 ACS on SIN
ACCESSION NOMER: 1983:198113 CAPIUS Full-text
DOUBLEN NOMER: 96:198113
FULL: 98:10115, 20118
TITLE: Reduction of 4,7-dipheryl-1,2,5-this (ona)diazolo (3,4-

clovridines affording

clyridines affording 2.5-diphenyl-3.4-diaminocyridines and ring closure of the diamines to floorescent azaheterocycles Mataka, Shuntaro; Takahashi, Raufumi; Inura, Tetsuro; Tashiro, Massahi, Res. Inst. Ind. Sci., Kyushu Univ. 86, Kasuga, 816, Tashiro, Massahi AUTHOR(S):

CORPORATE SOURCE:

Japan Journal of Beterocyclic Chemistry (1982), 19(6), 1481-8 CODEN: JHICAD; ISSN: 0022-152X

Journal

LANGUAGE: English CASREACT 98:198113 OTHER SOURCE(S):

DOCUMENT TYPE:

AB Reduction of diphenyl-1, 2, S-thiadiazolopyridines, e.g. I(X = S), and Reduction of diptemyl-1,2,2-thisdisologyridines, e.g. [(X = 5), and diptemyl-1,2,5-coxadisologyridines, e.g. [X = 0,0], gave diaminodiptemyl-pyridines, which were converted into floorescent triavole[4,5-c)pyridines, e.g. [II, selematianol],3-c-pyridines, inidiatole[4,5-c)pyridines, and pyrido[5,6-c)pyridines. Reduction of 1,2,5-coxadiatole[3,4-c)pyridines gave 4,5-dhydro[1,2,5]oxadiatole[3,4-c)pyridines.

II \$703.-2-00
No. SPM (Symthetic preparation); PRSP (Preparation)
(preparation of)
NO. SPM 1371-38-0 CAPUNS
CM [1.2,5] Ocadianalog(3,4-c)pyridine-6-carboxylic acid, 4,7-dipteryl- (CA



IT %58%-35-6 RL: RCT (Reactant); RACT (Reactant or reagent)

(reduction of) 76593-55-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl

ester (CA INDEX NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS

RECORD (13 CITINGS)

L17 ANSWER 29 OF 29 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1981:103255 CAPLUS <u>Pull-text</u> 94:103255 DOCUMENT NUMBER:

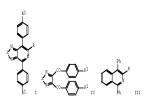
ORIGINAL REFERENCE NO.: 94:16851a, 16854a

94:18631a,18634a Reaction of 3,4-diaroyl-1,2,5-thia-(or -oxa)-diazoles and o-dimensylbenness with mineral soid salts of methylasines having an electro-avtikhteaving group Mataks, Shuntaro; Takahashi, Naufumi; Tashiro, Massahi, Tasku, Yubanke Res. Insk. Ind. Sci., Kyushu Univ., Fakuoks, 812, Janes AUTHOR(S):

CORPORATE SOURCE:

Japan Synthesis (1980), (10), 842-3 CODEN: SYNTBF; ISSN: 0039-7881 SOURCE: DOCUMENT TYPE:

Journal LANGUAGE: English CASREACT 94:103255 OTHER SOURCE(S):



AB The condensed pyridines I (K = 5, 0; R = COURt, COMPc, cyano, Bz; Rl = R, Me, Cl were obtained in 41-958 yield by treating II with ROEDWR2.HK (K = Cl, BROW). III (R = COURt, cyano) were similarly obtained.

II (SSRY.55-D) (FOUR SECTION COURT) (RESPONDED FOUR COURT) (REPRESENTED FOUR COURT) (REPRESENTED FOUR COURT) (REPRESENTED FOUR COURT) (REPRESENTED FOUR COURT) (R. 16359-35-0 CARUES COURT) (R. 1,2,5) CARUES (R. 1,2,5)

PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2011 American Chemical Society (ACS) Property values tagged with IC are from the SIC/VINITI data file

SIRUCTURE FILE UPDATES: 14 JUN 2011 HIGHEST RN 1309433-96-2 DICTIONARY FILE UPDATES: 14 JUN 2011 HIGHEST RN 1309433-96-2 CAS Information Use Policies apply and are available at: http://www.cos.org/legal/infopolicy.html

ISCA INFORMATION NOW CURRENT THROUGH January 14, 2011. Please note that search-term pricing does apply when conducting SmartSELECT searches.

http://www.cas.org/support/stngen/stndoc/properties.html

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REGISTRY includes numerically searchable data for experimental and neolini includes inductionally seatchance data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in RBGISTRY, refer to:

provided by InfoChem



76593-56-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, methyl ester (CA INDEX NAME)



76593-58-3 CAPLUS
Methanone, (4,7-diphenyl[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]phenyl (CA
INDEX NAME)



OS.CITING REP COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

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chain nodes : 11 12 ring nodes : 1 2 3 4 5 6 7 8 9

chain bonds :
1-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 11-12
exact bonds :

isolated ring systems : containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS

L18 STRUCTURE UPLOADED

FULL ESTIMATED COST

SINCE FILE SESSION 173.88 1347.52

SINCE FILE TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) ENTRY SESSION -25.23 CA SUBSCRIBER PRICE -52.20

FILE 'REGISTRY' ENTERED AT 08:06:41 ON 15 JUN 2011 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

chain nodes : 11 12 ring nodes :

1 2 3 4 5 6 7 8 9 chain bonds :

1-11 11-12

ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9

1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 11-12 exact bonds : 1-11 7-8 8-9

Match level : 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS

L19 STRUCTURE UPLOADED

=> s 119 sss full

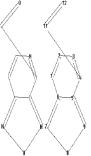
FULL SCREEN SEARCH COMPLETED - 156 TO ITERATE

100.0% PROCESSED 156 ITERATIONS SEARCH TIME: 00.00.01

0 ANSWERS

0 SEA SSS FUL L19

Uploading C:\Program Files\SINEXP\Queries\10584313\4.str



chain nodes : 11 12 ring nodes: chain bonds 4-11 11-12 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 11-12 exact bonds : 4-11 7-8 8-9

Match level : 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS

L21 STRUCTURE UPLOADED

⇒ file registry COST IN U.S. DOLLARS SINCE FILE TOTAL FULL ESTIMATED COST DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION 0.00 -52.2 -52.20

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http://www.cas.org/support/stngen/stndoc/properties.html

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chain nodes : 11 12 ring nodes:
1 2 3 4 5 6 7 8 9 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 11-12 exact bonds : 4-11 7-8 8-9 isolated ring systems : containing 1

nation level: .
12:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS

L22 STRUCTURE UPLOADED

=> s 122 sss full => S 122 SSS TULL FULL SEARCH INITIATED 08:07:27 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -476 TO ITERATE

100.0% PROCESSED 476 ITERATIONS SEARCH TIME: 00.00.01 0 ANSWERS

0 SRA SSS FUL L22

SINCE FILE TOTAL

ENTRY SESSION FULL ESTIMATED COST 197.88 1742.26 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -52.20

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http://www.cas.org/support/stngen/stndcc/properties.html

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chain nodes : 13 14 ring nodes : 1 2 3 4 5 6 7 8 9 chain bonds : 1-13 4-14 1-2 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 1-13 2-3 3-4 4-5 4-14 5-9 5-6 6-7 7-8 8-9 isolated ring systems : containing 1

GI-C O S N P

Match level : 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 13:Atom 14:Atom

L24 STRUCTURE UPLOADED

⇒ s 124 sss full FULL SEARCH INITIATED 08:09:03 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4222847 TO ITERATE

100.0% PROCESSED 4222847 ITERATIONS 114 BNSWERS

114 SEA SSS FUL L24

⇒ file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY 196.86 SESSION 1939.12 FULL ESTIMATED COST DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION TOTAL CA SUBSCRIBER PRICE -52 20

FILE 'REGISTRY' ENTERED AT 08:09:20 CM 15 JUN 2011 USB IS SUBJECT TO THE TERMS OF YOUR STM CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGSTERMS" FOR DETAILS. COPPRIGHT (C| 2011 American Chemical Society (ACS)

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http://www.cas.org/legal/infecolicy.html

ISCA INFORMATION NOW CURRENT THROUGH January 14, 2011.

Please note that search-term pricing does apply when conducting SmartSELECI searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to: http://www.cas.org/support/stugen/studoc/properties.ntml

SAMPLE SEARCH INITIATED 08:09:24 FILE 'REGISTRY SAMPLE SCREEN SEARCH COMPLETED - 210828 TO ITERATE

10 ANSWERS

100.0% PROCESSED 210828 ITERATIONS

| FULL PILE PROJECTION: | CMLINE **COMPLETE**
| PROJECTED LIBRATIONS: | 4189481 TO 4243639
| PROJECTED ANSWERS: | 11 TO 389

10 SEA SSS SAM L24 L26

=> d 126 ibib abs hitstr 1-'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY' 'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

SM - Index Name, MP, and structure - no RN FIDE - All substance data, except sequence data IDE - FIDE, but only 50 names

TIG - FITE, but only 50 names
SQDIE - IDE, jours sequence data
SQDIES - Same as SQDIE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
5QD - Same as 5QD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

EPROP - Table of experimental properties PPROP - Table of predicted properties PROP - EPROP, ETAG, PPROP

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ABS -- Abstract

ABS - Abstract
APPS - Application and Priority Information
BIB - CA Accession Number, plus Bibliographic Data
CAN - CA Accession Number, plus Bibliographic Data
CRIE - CA Accession Number, plus Bibliographic Data (compressed)
IDC - Index Data
IPC - International Patent Classification

PATS -- PI, SO STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels

IBIB -- BIB, indented, with text labels ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original) OIBIB ----- OBIB, indented with text label

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citation

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when

it is available.
The MAX format is the same as ALL plus SPEC.

The IALL format is the same as ALL with BIB ARS and IND indented, with text labels.

For additional information, please consult the following help

HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. ENTER DISPLAY FORMAT (IDE):end

SINCE FILE FULL ESTIMATED COST 0.51 1939.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -52.20

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http://www.cas.org/support/stpger/stndcc/properties.html

Uploading C:\Program Files\STNEXP\Queries\10584313\5.str

114 ANSWERS

ring nodes : 1 2 3 4 5 6 7 8 9 1-13 4-14 1-6 2-3 3-4 4-5 5-9 5-6 6-7 7-8 8-9 exact/norm bonds : 1-2 1-6 1-13 2-3 3-4 4-5 4-14 5-9 5-6 6-7 7-8 8-9

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 13:Atom 14:Aton

1/27 STRUCTURE UPLOADED

=> = 127 === fn11

FULL SEARCH INITIATED 08:09:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4222847 TO ITERATE

100.0% PROCESSED 4222847 ITERATIONS SEARCH TIME: 00.00.14

114 SEA SSS FUL L27

⇒ file caplus COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY 196.86 SESSION FILL ESTIMATED COST 2136.49 SINCE FILE ENTRY 0.00 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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FILE COVERS 1907 - 15 Jun 2011 VOL 154 ISS 25 FILE LAST UPRATED: 14 Jun 2011 (20110614/ED) FILES CLASS FILES (/MCL LAST FELCAMENE: Apr 2011 USPIO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2011

CAplus now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 201

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This file contains CAS Registry Numbers for easy and accurate substance identification

 \Rightarrow d 129 ibib abs hitstr 1- YOU HAVE REQUESTED DATA FROM &1 ANSMERS - CONTINUE? Y/ (N) :y

L29 ANSWER 1 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN

KIND DATE APPLICATION NO. A1 20110303 WO 2010-SG174 20100430 WO 2011025454 201102564 Al 20110303 MG 2010-55174 20100405 MG 2010-55174 S. 2010-55174 MG 2010

ChipMon James and Polymon to the July (1970)

1269638-90-5 CAPLUS

Poly(2,1,3-benioxadiazole-4,7-diyl-1,4-phenylene(2,3,5,6-tetrahydro-3,6-dioxopyrrolo[3,4-c]pyrrole-1,4-diyl|-1,4-phenylene] (CA INDEX NAME)



THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010.862974 CAPLUS Ptl:text

DOCUMENT NUMBER: 153:260324

TITLE: Protonatable n atom-containing organic small-molecule

TNIVENTOR (S) -

PATENT ASSIGNEE(S):

Protonstable n stom-containing organic small-malequie film and preparation method Dau, Yangyuan; Kae, Minishas; Qian, Lingfeng; Ma, Ning; Sheng, Qiacomo; Shanghai Jiao Tong University, Peop. Rep. China Paning Ibnanli Shenqing Gongkai Shuoningshu, 12pp. COURS: CONEST

LOCUMENT TYPE: Pe LANGUAGE: C: FAMILY ACC. NUM. COUNT: 1 PAIENT INFORMATION: Patent Chinese

PATENT NO. KIND DATE APPLICATION NO. DATE A 20100707 CN 2010-10300069 CN 101768138 20100107 PRIORITY APPLN. INFO.: OTHER SOURCE(S): CN 2010-10300069 MARPAT 153:260324

The invention relates to a protonstable N atom-containing organic small-mol. film (formula on page 2), wherein formulas of R1-R4 are given. The method for preparing the protonstable N atom-containing organic small-mol. film (entails (1) dissolving or dispersing protonstable N atom-containing organic small mol. in organic solvent to obtain 10-mol/11-01-mol/12 system. (2) adding protonic acid, ultrasonic wave-assisted dispersing or mech. stirring to obtain electrolyte; (3) placing PR electrode as pos. electrode and conductive metal sheet or conductive glass as new, electrode in the electrolyte, carrying out electrodeposition to obtain deposited film; (3) drying. The protonic acid is rifleworaceit acid, sulfuria caid or hydrochloric acid. Encoragina colvent is NN-dimethylformanide, chloroform, acetonitrile and/or nitromethane. The method has advantages of low cost, simple operation and low energy cost and may be used for com. production \$(2)\(\frac{1}{2}\ The invention relates to a protonatable N atom-containing organic small-mol-

6625-34-9 CAPLUS

CN 2,1,3-Benzoxadiazole, 4,7-diphenyl- (CA INDEX NAME)



1236771-81-5 CAPLUS

Benzenamine, 4,4'-(2,1,3-benzoxadiazole-4,7-diyl) bis [N,N-diphenyl- (CA NNDEX NAME)

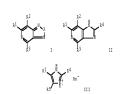


L29 ANSWER 3 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:205445 CAPLUS Full-text OCUMENT NUMBER:

152:257718
Azole- or imidazole-type fluorescent dyes for biomolecule detection with improved water solubility and labeling efficiency

Isobe, Shinichiro; Mataga, Shuntaro INVENTOR(S): PATENT ASSIGNEE(S): Japan Jpn. Kokai Tokkyo Koho, 24pp. CODEN: JKKKAF DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NOV. COUNT:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| | | | | |
| JP 2010037511 | Α | 20100218 | JP 2008-205238 | 20080808 |
| PRIORITY APPLN. INFO.: | | | JP 2008-205238 | 20080808 |
| OTHER SOURCE(S): | MARPAT | 152:257718 | | |
| GI | | | | |



AB The scole-type fluorescent dyes are depicted as I (scole N may be replaced with CR4 or Nm?'Am-; Rl or R4 = LM; M = (um) substituted N cation—or N-containing groups. I (linker! = (CR:CR5); n = 1-5; N = H, (um) substituted alkyl, sulfo, etc., R2, R3, the rest of Al and R4 = H, holo, (um) substituted caronatic/alignatic hydrocarbyl or heterocyclic group; X = (um) substituted c, N, S, O, Sc. or S; R' = (arcmain: iring-containing) alighatic/arcsatic hydrocarbyl; Am = halide, CTSOD-, R8-P., FF6-1. The imidstole-type fluorescent dyes are depicted as II or III (scale N may be replaced with CR5, Nm?'Am-; 1 of dissole N may be replaced with Nm?'Am-; 1 and is not supplied to the containing alighatic fluorescent dyes are depicted. R1 of R1, 4,5 = M; Nm, L = same as above; R2, R3, the test of R1, 4,5 = M, halo, (um) substituted arcmatic/alighatic hydrocarbyl or heterocyclic group; R', R' = (arcmatic group-containing) alighatic/caronatic hydrocarbyl; Am = same as above! The fluorescent dyes show increased fluorescent intensity, thus enabling high-ensitivity detection of nucleic acids, proteins, peptides, polysocharides, metal ions, etc. of nucleic acids, proteins, peptides, polysaccharides, metal ions, etc.

RE: ARG (Realytical reagent use); HMF (Industrial manufacture); RCT (Reactant); AMST (Amalytical study); PREP (Preparation); RACT (Reactant or

(Beactant): AMSI (Amalytical study): PREP (Preparation): RAGI (Beactant or reagent): USES (Uses)
(fluorescent dge or intermediate; anole- or inidatole-type fluorescent dges bearing) focision- of technical groups for himsel, detection with improved water solubility and labeling efficiency)
[10,2,5] Obadiszolo(3,4-c) pyridine, 4,1-bis (4-methoxyphenyl)-6-[2-(3-

IΓ

(130x67-3-3-2)
Br. 280 (Radlytical reagent use); DF (Industrial nanofacture); MNST (Realytical stumy); PREP (Preparation); SSSS (Uses)
(Fluorescent dye; abule- or inidatole-type fluorescent dyes bearing N cation- or N-containing groups for himol. detection with improved water solubility and labeling efficiency)
120075-98-2 (ARMIN SPECIAL PROPERTY OF THE PR

$$\bigvee_{0}^{\tilde{G}} (\mathbb{Z}_2) : \longrightarrow \mathbb{Z}_{\mathbb{Z}} (\mathbb{Z}_2)$$

II 18852-55-60 807038-60-20 1208075-88-30
1800075-81-75 1208075-53-49
NE. DRY [Industrial manufacture]; RCT (Reactant); PREP (Preparation); PACT (Reactant) creagent) (intermediate; anole- or inidazole-type floorescent dyes learning N cation- or N-containing groups for bicool, detection with improved water solubility and labeling efficiency)
RN 05593-55-0 CAPCUS

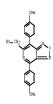
 ${\tt CN} \hspace{0.5cm} \textbf{[1,2,5]} \\ \textbf{0xadiazolo[3,4-c]} \\ \textbf{pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl} \\$

RN 857048-00-1 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



RN 1208079-89-3 CAPLUS
CN [1,2,5] Oxadiazolo[3,4-c] pyridine-6-methanol, 4,7-bis(4-methoxypbenyl)-

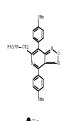


PN 1208079-91-7 CAPLUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine, 6-(chloromethyl)-4,7-bis(4-

methoxyphenyl) - (CA INDEX NAME)



RN 1208079-93-9 CAPGUS CN Phosphonium, [[4,7-bis(4-methoxyphenyl][1,2,5] oxadiazolo(3,4-c]pyridin-6-yl]methyl]triphenyl-, chloride (1:1) (CA INDEX NAME)



..MIGHT 2011 ACS on STN

LONGISTER OF CAPADS Pull-box:
LONGIST LONGISTER

ALCOR(S): Looke, Shinichiro

Japan
SCORCE: PATENT ASSIGNER(S): Japan
COMMENT TIFE: Patent
LANGISTOR PATENT ACC. NUM. COUNT; 1

PATENT NO.

PATENT NO.

PRIORITY APPEN. 1NEO.: MARRAY 150:163066 W0 0207-3P64894 20010730 OTHER SOURCE(S): WARRAY 150:163066 B It is intended to provide a diagnostic agent possessing a high antibody-labeling ratio, in which a fluorescent dye possessing a high fluorescence intensity is used. The diagnostic agent possesses a color development part consisting of an organic electroluminascence (EL) dye as a fluorescent dye, and a binding part capable of binding to an antibody. In comparison to the entirity agents, this diagnostic agent renables to improve an antibody-labeling ratio, and detect an antigen at an increased sensitivity owing to its high fluorescence intensity even in a solid state.

If MARIA-N-P SINGS-QL-SP 20053-06-0P 1155(22-54-0P EL) ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Peparation) (diagnostic agent/method using high intensity fluorescent dye for

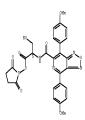
(diagnostic agent/method using high intensity fluorescent dye for

labeling antibody) 921934-98-7 CAPLUS

β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)

921935-04-8 CAPLUS L-Serine, N-[(4,7-bis(4-methoxyphenyl)(1,2,5)oxadiazolo(3,4-c)gyridin-6-yl)carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

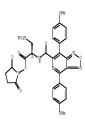


L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl)carbonyl)-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NOME)

1107629-28-6 CAPKUS

D-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]-3-sulfo-, 1-(2,5-dioxo-1-pyrrolidinyl) ester (CA INDEX NAME)

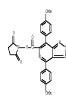
Absolute stereochemistry.



II 85535-85-99 855781-54-90 85705-80-09 821032-91-09 921825-01-50 821035-81-09 821925-91-60

Sinity-54-57
Bit RCI (Pacatant); SRM (Synthetic preparation); PREP (Preparation); RRCI (Pacatant or reagent) (diagnostic agent/method using high intensity fluorescent dye for labeling antibody) 855781-83-8 (ARUUS [1,5])Oradio-65-carboxylic acid, 4,7-bis(4-methoxyphenyl) - (CR INDER NOME)

855181-84-9 CAPLUS
[1, 2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxypbenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



857048-00-1 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

RN 921934-97-6 CAPLUS

β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

RN 921935-01-5 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-methoxymbenyl][1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INNEX NAME)

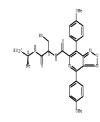
921935-03-7 CAPLUS

Absolute stereochemistry.

L-Serine, M-[[4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

PN 921935-05-9 CAPLUS CN L-Alanine, N-114.7-L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yl)carbonyl)-L-seryl- (CA INDEX NAME)

Absolute stereochemistry.



1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L29 MISHER 5 OF 81 CAPUUS COPPRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:1427466 CAPUUS [01]-text
DCOURGEN MUMBER: Biological tissue specimen production method
INVENTOR(S): Loobe, Shinichiro

PATENT ASSIGNEE(S):

Japan Jpn. Kokai Tokkyo Koho, 13pp. SOURCE: CODEN: JKKKAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 2008286694 | Α | 20081127 | JP 2007-133009 | 20070518 |
| PRIORITY APPLN. INFO.: | | | JP 2007-133009 | 20070518 |
| | | | | |

- OTHER SOURCE(5): CASEROT 150:2116

 AB A hiol. tissue specimes production method is provided, which enables to prevent a sample from changing its state or shape even after dehyptation followed by drying, and thereby, observe the sample in a state close to a living bony. The hiol. tissues specimes production method comprises dehydrating tissue or cells collected from a test subject using a dehydrating agent consisting of an ether alo. (e.g., ethosymposmal) or a quiriedy ether. The method enables to prevent a sample from petting distorted or contracted to cause a change in its state or shape unlike the case with an alc. or acctore which high reliability.

 If \$2.761-48.

REC: ARU (Analytical role, unclassified); RCI (Reactant); SPN (Synthetic preparation); ANSI (Analytical study); PREP (Preparation); RACI (Reactant or reagent|

(biol. tissue specimen production method using ether alc. for dehydration) 855781-84-9 CAPLUS

855781-84-9 CAPLUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-methoxypbenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INUEX NAME)



855/81-65-8P 857(m8-00-1):
RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI

(biol. tissue specimen production method using ether alc. for dehydration)

(1, 2, 5) Oxadiazolo (3, 4-c) pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CA INDEX NAME)

857048-00-1 CAPLUS

[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

L29 ANSWER 6 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:1136772 CAPLUS Full-text DOCUMENT NUMBER: 149:425923

TITLE:

Preparation of benzothiazole or benzoxazole derivatives as electron transfer materials Qiu, Yong; Li, Yinkui; Qiao, Juan; Tang, Lingtian; INVENTOR (S):

Qiu, Yong; Li, Yinkui; Qiao, Juan; Tang, Lingtian; Duan, Lian
Jianghua University, Peop. Rep. China; Beijing
Visianox Technology Co., Ltd.; Kunshan Visianox
Display Technology Co., Ltd.;
Faming Zhanali Sheeqing Gorgkai Shnoningshu, Jépp.
COESH: NUXEW
Patent PATENT ASSIGNER(S):

SOURCE:

DOCUMENT TYPE: Chinese

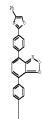
LAMGUAGE: C FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 20080917 CN 2008-10104835 CN 101265258 CN 101265258 20080424 20110330 PRIORITY APPLN. INFO.: CN 2008-10104835 20080424 OTHER SOURCE(S): MARPAT 149:425923

The title compds, with general formula I (wherein Rl - 84 = independently R, Cl-8 akpl, O8-30 (um) substituted acyl, or Rl and R2 taken together with the carbon across to which they are attended from a ring, RI, EQ, and Y = independently O6 or S, Hat and AP2 = independently O6-30 K, Hat and Y = independently O6-30 AB The title compds. with general formula I [wherein R1 - R4 = independently H,

100000-20-3-3 (MORNO-1-2-3) (MORNO-1-3-3) (M

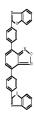
PAGE 1-A



PAGE 2-A

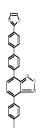


RN 1065657-09-1 CAPLUS CN 2,1,3-Benzoxadiazole, 4,7-bis[4-(2-benzoxazoly1)pheny1]- (CA INDEX NAME)



1065657-13-7 CAPUS 2,1,3-Penroxadiarole, 4,7-bis[4'-(2-oxazoly1)[1,1'-bipheny1]-4-y1]- (CA NNDEX NOME)

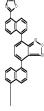
PAGE 1-A



RN 1065657-15-9 CAPLUS

2,1,3-Benzoxadiazole, 4,7-bis[5-(4-methyl-2-oxazolyl)-1-maphthalenyl]-(CA INDEX NAME)





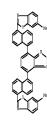
PAGE 2-A

PAGE 2-A

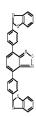
PAGE 1-A



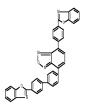
RN 1065657-19-3 CAPLUS
CN 2,1,3-Benzoxadisole, 4,7-bis[5-(6-methyl-2-benzoxadyl)-1-maghthalenyl](CN ROBEX NAME)



RN 1065657-22-8 CAPLUS
CN 2,1,3-Benzoxadiazole, 4,7-bis[4-[2-benzothiazoly1|pheny1]- (CA INDEX NAMS)

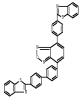


RN 1065657-29-5 CAEGUS
CN 2,1,3-Benzoxadiazole, 4-[4'-(2-benzoxazolyl)[1,1'-biphenyl]-4-yl]-7-[4-(2-benzoxazolyl)phenyl]- (CA INDEK NAME)

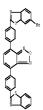


RN 1065657-34-2 CAPLUS CN 2,1,3-Benzoxadia---

2.1,3-Benzothiazolyl|phenyl] - (CA INDEX NAME)



 $\label{local-control} \begin{array}{lll} 1065657-39-7 & \texttt{CAPLUS} \\ 2,1,3-\texttt{Benzoxadiazole}, & 4-\{4-(2-\texttt{benzothiazolyl})\texttt{pbenyl}\}-7-\{4-(6-\texttt{methyl}-2-\texttt{benzotazolyl})\texttt{pbenyl}\}-\\ & (\texttt{CA INDEX NAME}) \end{array}$



L29 ANSWER ? OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

PAULS COMPAIGNT 2011 ACS on STM
2008.99544 CARUNS Fall-teat
149.225995
Polymerizable asole fluoreacent dyes with high
fluoreacent intensity and good weather resistance, and
their manufacture and polymers
labops, Shinchiror, Mataga, Shombaro; Nizuki, Keiji;
Taminaka, Teniro; Kawashina, Shinichi; Tawkuda,
Takahiko
Barian Chemicala, Inc., Japan
Jon. Rokai Tokeyo Roho, 32pp.
COORN: JUDUAS
Patent

APPLICATION NO.

DATE

PATENT ASSIGNEE(S): SOURCE:

Patent

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE

JP 2008184592
PRIORITY APPLAN INFO::
OTHER SOURCE(S):

A 20080814 JP 2007-21687 JP 2007-21687 CASREACT 149:225936; MARPAT 149:225936

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title fluorescent dyes are represented by general formula of L-III [X = (substituted) C, N, O, etc.; Y = N, RAC, R:NbAn-; R1-N5 = R, halo, alxyl, etc.; at least one of R1, R4, and R5 = alkemyl- or alrynyl-terminated group; R', R'' = (containt in-general similar allerial producestryl, are caused by the containing alighatic hydrocartyl; Na = halo, C73003, RF4, PF6]. The fluorescent dyes are manufactures from acid cholinoid editive, (one of R1, R4, and R5 = 0001) of I-III and allyl-containing active B couples, or manufactured from haloslayl derivs. (one of R1, R4, and R5 = haloslayl) of I-III and allernyl- or alkynyl-substituted N-containing meterocycles. Thus, I (R1 = C08002007802) R2, R3 = Rh; X = 0; Y = NI was manufactured from 4-methoxysectophenome in 6 steps.

Homopolymer of I showed yellow fluorescence, which was not changed after exposing to natural light under air at room temperature for 3 wk.

10 25091-260-39 85004-00-1; 20085-00-19 PREP (Preparation); PRCT (Reactant or reagent)
(polymericable saiole fluorescent dyes with high fluorescent intensity and pood weather resistance, and their manufacture and polymers)

10 2578-18-3-8 CAPLUS

11 2,59 Omenicable 3,4-c)pyridise-6-carboxylic acid,
4,7-his(4-sethoxypheny2)- (CA NUREX NOME)



857048-00-1 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



RN 921935-07-1 CAPLUS
CN (1,2,5)0xadiazolo(3,4-c)pyridine-6-carbonyl chloride,
4,7-bia(4-methoxyphenyl)- (CA RUDEX NAME)



RL: IMF (Industrial manufacture); RCI (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

USES (USes)

(polymerizable ande fluorescent dyes with high fluorescent intensity and good weather resistance, and their nanufacture and polymers)

10/3882-99-5 CARUS

(1, 5,5)Candis 10(3, 4-c)pyridine-6-carboxanide,
4,7-his (4-methoxyphenyl)-N-2-propen-1-yl- (CA INDEX NOME)

II 10/32/-96-35 10/39/2-96-90 10/32/2-96-15

ME: DM (Industrial assofisature); TBM (Technical or engineered material use); PBMP (Preparation); USES (Uses)
[polymeriania asole fluorescent dyes with high fluorescent intensity and good weather resistance, and their manufacture and polymers)
IN 10/38/2-96-0 CRUIS

IN 10/38/2-96-0 CRUIS

IN 10/38/2-96-0 CRUIS

IN 10/38/2-96-0 CRUIS

4,7-bis(4-methoxypheny1)-N-2-propen-1-y1-, homopolymer (CA INDEX NAME)

CM 1

CRN 1043892-90-5 CMF C23 H20 N4 O4

RN 1043892-95-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxamide

4,7-bis(4-methoxyphenyl)-N-2-propen-1-yl-, polymer with ethenylbenzene (CA INDEX NAME)

CM 1

CRN 1043892-90-5 CMF C23 H20 N4 O4



CM 2

CRN 100-42-5 CMF C8 H8

82C==CB=P8

PN 1043892-96-1 CAPLUS
CN 2-Propencic acid, 2-methyl-, methyl ester, polymer with
4,7-mis(4-methoxyphenyl)-N-2-propen-1-y2[1,2,5]oxadiazolo[3,4-c]pyridine-6-

carboxamide (CA INDEX NAME)

CM 1

CRN 1043892-90-5 CMF C23 H20 N4 O4

CM 2

CRN 80-62-6 CMF C5 H8 O2

EZĞ Ü

L29 AMSWER 8 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2008:829336 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 149:130464 TITLE:

Azole-based fluorescent dyes and their preparation Isobe, Shinichiro; Mataga, Shuntaro INVENTOR(S):

PATENT ASSIGNEE(S):

Japan Jpn. Kokai Tokkyo Koho, 34pp. CODEN: JKXXAF Patent

DOCUMENT TYPE:

Japanese

LANGUAGE: J
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

KIND DATE APPLICATION NO DATE A 20080710 JP 2006-349504 20061226 JP 2008156556 PRIORITY APPLN. INFO.: JP 2006-349504 20061226 CASREACT 149:130464; MARPAT 149:130464 OTHER SOURCE(S):

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- No The floorescent dyes are asoles I, II, or III [R] is DM in I and III; R1 or R4 is DM in II; M = (um) substituted pyridinium, amino, piperidinium, piperalinium, indisoolium, thisoolium, benchisaolium, benchisaolium, benchisaolium, benchisaolium, benchisaolium, benchisaolium, benchisaolium, idinaberi gideret bond, (CER) (n = 1-4), NBCO2, COMB, CO2, SOURE, MCC(1889)MB, O. S. NB, Ar. (COMAN) (R = albyl; Ar = arylene); the rest of R1 and R8 in II, R2, R = R8, halo, (um) substituted aryl, alipstic hydrocarby, beterocycly! X = (um) substituted C, N, S, O, Se, or B storm, R' = (aromatic inde-containing albyl, Aryl; Ar = halide ino, CFISOO], BF4-, PF6-], prepared by reaction of haloshyl compds. with mainer. A pyridinium group-containing thisdisolopyridine derivative (prepared from (chlorentyl) thisdisolopyridine derivative and pyridine) showed hippinetensity floorescence in DNSO and in RDO, showing the possibility of application to high-seasitivity detection of binoles. application to high-sensitivity detection of biomols. $1038263 \cdot 18 \cdot 59$ II
- RE: IMF (Industrial manufacture); RCI (Reactant); SPN (Symthetic preparation); PREP (Preparation); RACI (Reactant or reagent) (preparation of aroles having N-containing cationic groups as fluorescent

s useful for high-sensitivity detection of bicmols.)
1036253-18-5 CAPUUS
[1, 2,5]Obadiazolo[3,4-c]pyridine, 4,7-diphenyl-6-(3-pyridinyl)- (CA INDEX



1926255-24-69 RE: INF (Industrial manufacture); SPN (Synthetic preparation); PREP

(Preparation)
(preparation of azoles having N-containing cationic groups as fluorescent

useful for high-sensitivity detection of biomols.)

USETUL for INSPECTION CARMS

Pyridinium, 1-(3-{(2,5-dioxo-l-pyrrolldinylloxy)-3-exepropyl)-3-(4,3-diptenyl[1,2,5] oxadiazolo(3,4-c)pyridin-6-yl)-, bromide (1:1) (CA INGEX

RL: RCI (Reactant); RACI (Reactant or reagent)

(preparation of acoles having N-containing cationic groups as fluorescent

oyes
useful for high-sensitivity detection of bicmols.)

RN 1021418-25-6 CARCES
(T [1,2,5] Dandia snol(3,4-c)pyridine-6-carboxylic acid, 4,7-diptenyl-, propyl aster (CA INGEN RAME)

L29 ANSWER 9 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 2008:777672 CAPLUS Full-text 149:111760

hair compositions comprising a direct dye and a thickener

Plos, Gregory L'Oreal, Fr. PATENT ASSIGNEE(S): Fr. Demande, 68pp. CODEN: FRXXBL SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: E FAMILY ACC. NUM. COUNT: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|---------|----------|-----------------|----------|
| | | | | |
| FR 2910277 | A1 | 20080627 | FR 2006-55952 | 20061226 |
| RIORITY APPLN. INFO.: | | | FR 2006-55952 | 20061226 |
| EURD COURGE IC | 1/2 222 | | | |

TOTALE SOURCES(): MARPAT 149:111160

No The invention relates to a bair composition including a particular direct dye and a thickness. It also estates to a process of dyeing human hair. Thus, a composition contained an oxadianolopyridine derivative 3 + 10-3 no.1.4, PRS 6, parabens 0.06, hydrocythyl cellulose U.S. polyphycoside 5, bennyl alc. 4, water to 504, and cirates buffer gp to 1008.

If '0524-07-6 '0533-55-0 '0533-55-1

76592-57-2 76593-68-3 95731-52-4 | 05/30-37-8 | 05/30-36-0 | 136/124-32-4 | 226/30-33-5 | 225/35-76-0 | 225/35-31-1 | 5.0336-43-6 | 247/30-13-8 | 567/21-53-2 | 567/36-53-1 | 565/36-53-1 | 565/36-53-1 |

Proceedings of the Control of the Co



76593-55-0 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INGEX NAME)

Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, nethyl (CA INDEX NAME)

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX



- % 76593-58-3 CAPLUS Methanore, $\{4,7\text{-diphenyl}\{1,2,5\}$ oxadiazolo $\{3,4\text{-c}\}$ pyridin-6-yl $\}$ phenyl (CA NDEX NOMES)



- 85731-32-4 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-methanol, 4,7-diphenyl- (CA INDEX



- 85731-37-9 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine, 4,7-diphenyl- (CA INDEX NAME)



- 85731-38-0 CAPLUS [1,3,5]Oxadiarolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA NDEX NOME)



- PN 136124-62-4 CAPLUS
- CN Furo[3,4-c]pyridine-6-carbonitrile, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



- RN 224430-73-3 CAPLUS
 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-chlorophenyl)- (CA INDEX NAME)



- 225795-70-0 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



- RN 225795-11-1 CAPKUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)





- PN 847203-13-8 CAPLUS
- [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-diphenyl- (CA INDEX NAME)



- 855781-83-8 CAPLUS
 [1,2,5] Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methoxyphenyl)- (CA INDEX NOME)



- 857048-00-1 CAPLUS
 [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid,
 4,7-his(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis([1,1'-biphenyl]-4-yl|-, ethyl ester (CA INDEX NAME)



- 908066-53-5 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)- (CA INDEX NAME)



- RN 908866-55-7 CAPLUS
 CN Ethanesmifonic scid, 2-[[(4,7-bis(4-sethylphenyl](1,2,5)exadiazolo(3,4-c)pyridin-6-yl]carbonyl]aniso]- (CA INDEX NUME)



13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 10 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

CAPLUS COMPRIGHT 2011 ACS on STN
2008:777665 CAPUUS Pull-toxy
149:111759
Bair compositions comprising direct dyes and
surfactants
Plos, Gregory
('Oreal, Fr.
Pr. Demande, Sépp.
COCEN: FRINSH
Patent
French
1 INVENTOR (S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Pa
LANGUAGE: Fr
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE 20061226 FR 2910278

- FR 2910278 All 20000627 FR 2006-5553 20061226
 FR 2006-5553 20061226
 OTHER SOURCE(5): MARPAI 149:111759

 AB The invention relates to a composition including a direct dye and a surfactant. It also relates to to use of this composition for oal of man hair. Thus, a composition contained an oxadiazolopyridize derivative 3 + 10-3 mod. 4, Oraniz CB10 8 and water gs to 1004.

 II 13526-8-15 5522-35-5 6 7523-55-1 1004.
 2003-17-2 7659-15-2 2539-15-1 2539-15-1 1004.
 2013-17-3 2005-15-1 2539-15-1 2539-15-1 1005-15
- New York (Generatic use); BIOL (Biological study); USES (Uses) (Mair compes. comprising direct dyes and surfactants)

 RN 725244-65 CAPUIS

 CN [1,2,5]Onadiazolo[3,4-c]pyridine, 4,6,7-triphenyl- (CA INDEX NAME)



- 76593-55-0 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethylester (CA INDEX NAME)



- 76593-56-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, methyl ester (CA INDEX NAME)



- 76593-57-2 CAPLUS [1,2,5]Owadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEK NAME)



- 76593-58-3 CAPLUS
 Methanone, (4,7-diphenyl[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl|phenyl- (CA
 NDEX ROME)



- RN 85731-32-4 CAPLUS
 CN [1,2,5] Oxadiazolo[3,4-c] pyridine-6-methanol, 4,7-diphenyl- (CA INDEX



- RN 85731-37-9 CAPLUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine, 4,7-diphenyl- (CA INEEX NAME)





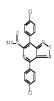
- RN 136124-62-4 CAPLUS
 CN Furo(3,4-c)pyridine-6-carbonitrile, 1,3,4,7-tetraphenyl- (CA INDEX NOME)



- 224430-73-3 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-chlorophenyl)- (CA INDEX NAME)



- RN 225795-70-0 CAPKUS CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



- RN 225795-71-1 CAPLUS CN [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)



- 519182-44-6 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine, 4,7-bis(4-bromophenyl|-6-phenyl- (CA NOEK NOME)



- 847203-13-8 CAPLNS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,7-diphenyl- (CA NDEX NOME)



- 855781-83-8 CAPLUS [1,2,5]0xadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)- (CA INDEX NOME)



- 857048-00-1 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)



- 865091-12-1 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-his([1,1"-biphenyl]-4-yl|-, ethyl ester (CA INDEX NOME)



- RN 908866-53-5 CAPLUS
 CN [1,2,5]0xadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methylphenyl)- (CA INDEX NAME)



- RN 908866-55-7 CAPLUS
 CN Ethanesulfonic acid, 2-[[[4,7-bis(4-methylphenyl][1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]oarbonyl]anino]- (CA NDEX NAME)



- REFERENCE COUNT:
- 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 AMSHER II OF 81 CARCUS COPPRIGHT 2011 MCS on STW
ACCESSION NOWHER: 2008;548112 CARCUS <u>Sull-text</u>
DOOMENT NUMBER: 148:505662
TITUE: Comment or organisms containing electroluminescent dyes
INVENTOR(5): Labe, Shinichiro
PATENT ASIGNEE(5): Japan
SCUNCES: Jpn. Nokai Tokkyo Noho, 43pp.
COCEN: NOWAY
DOOMENT TYPE: Patent
ANNIGAGE: Japanese

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--------|------------|-----------------|----------|
| JP 2008105976 | λ | 20080508 | JP 2006-288905 | 20061024 |
| PRIORITY APPLN. INFO.:
OTHER SOURCE(S): | MARPAT | 148:502662 | JP 2006-288905 | 20061024 |

- The invention relates to a commettic composition containing an organic fluorescent dye having an organic electroluminescent (EL) coloring region fluorescent dye having an organic electricluminescent (BL) coloring region consisting of conjugated ancide derivative or initiacole derivative including 2 l heteroatom, selenium atom, or boron atom. The fluorescent dye may further have as amino acid or peptide libete region. The consentic composition provisies long-lasting brightness to nail, hair, etc., without causing damage. For enample, 4, 7-bais(4-methomyphenyl)-12,2,5-consdiszolo-(3,4-c)pyridize-6-carboxylle acid palamines and H-bydroxymoscinnide derivative was prepared, and enamined for list fluorescent property for 2 wt. SCHOLO-NIO-SUBSACTIVES (SCHOLO-NIO-SUBSACTIVES) (SCHOLO-NIO-SUBSACTIVES) (SCHOLO-NIO-SUBSACTIVES) (SCHOLO-NIO-SUBSACTIVES) (SCHOLO-NIO-SUBSACTIVES) (Seactant); SRN (Synthetic preparation); BEDG (Biological study); PREP (Preparation); BEDG (Beactant); USES (Ubsac)
- (Uses)
- (cosmetic compos. containing electroluminescent dyes)

 RM 657048-00-1 CAPRUS

 CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
 4,7-his(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

- PN 921934-97-6 CAPLUS
 CN β-Alanine, N-[(4,7-bis(4-methoxyphenyl)(1,2,5)oxadiazolo(3,4-c)pyridin-6-yl]carbonyl]- (CA INDEX NAME)

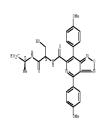


Absolute stereochemistry.

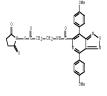
- 921935-03-7 CAPLOS L-Serine, N-[14,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

- RN 921935-05-9 CAPLUS
 CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INDEX NAME)



- CN \$\text{\$\$\text{\$\exititt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$}



- 921935-02-6 CAPLOS

 L-Alamine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo-, 2,5-dioxo-1-pyrrolidinyl ester (CA NOEK NOME)

Absolute stereochemistry.

- 921935-04-8 CAPMUS L-Serine, N-[{4,7-bis(4-methoxypbenyl)[1,2,5]oxadiazolo(3,4-c]gyridin-6-yl]carbonyl]-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)

- RN 921935-06-0 CAPLUS CN L-Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo(3,4-c)pyridin-6-yi]carbonyl)-L-seryl-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)

- II 1821(8-25-5

 RL: RCT (Reactant); RACT (Reactant or reagent)
 [(repearation of commetic compas, containing electroluminescent dyes)

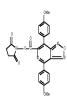
 RM 1021(48-25-6 CARCUS

 (1, 2, 5) Oxadiazolo (3, 4-5) pyridine-6-carboxylic acid, 4, 7-diptemyl-, propyl ester (CA INDEX NAME)

- II 255761-23-60 855781-64-32
- II CC 90-02-09 (Passant); SRM (Synthetic preparation); PREP (Preparation); RRCI (Reschant or respect) (repeated on from the company of the co



- 855781-84-9 CAPLIS
 [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid,
 4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



L29 MISWER 12 09 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:122337 CAPLUS Sull-text DOCUMENT NUMBER: 148:163065

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

148:153003 Biological specimen labeled with novel fluorescent dye, and its preparation method Isobe, Shinichiro; Nakamura, Keiichiro; Kanemaru,

INVENTOR (S):

Takaaki PATENT ASSIGNEE(S):

Japan PCT Int. Appl., 91pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: 1

| PAT | ENI | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION I | NO. | | D | ATE | |
|-----|------|-------|-------|-----|------|-----|----------|-----|-----|------|------|-------|-----|-----|-----|------|-----|
| | | | | | | - | | | | | | | | | - | | |
| WO | 2008 | 0132 | 60 | | A1 2 | | 20080131 | | | 10 2 | 007- | JP64 | 755 | | 2 | 0870 | 727 |
| | W: | AΕ, | AG, | AL, | AM, | AΓ, | AU, | AΣ, | BA, | BB, | BG, | BH, | BR, | В₩, | BY, | ΒΣ, | CA, |
| | | CH, | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | ΕM, | DO, | DΣ, | EC, | EE, | EG, | ES, | FI, |
| | | GB, | GD, | GE, | GH, | GM, | GT, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, |
| | | KM, | KN, | KΡ, | KR, | K2, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | ME, |
| | | MG, | MK, | MN, | М, | MX, | MY, | MΣ, | NA, | NG, | NI, | NO, | N2, | œ, | PG, | PH, | PL, |
| | | PT, | RO, | RS, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | IJ, | TM, | TN, |
| | | TR, | TI, | 12, | UA, | UG, | US, | UΣ, | VC, | W, | ΣA, | 2M, | ZW | | | | |
| | RW: | λī, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, |
| | | IS, | II, | LT, | LU, | LV, | MC, | MI, | NL, | PL, | PΓ, | RO, | SE, | SI, | SK, | TR, | BF, |
| | | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | IG, | BW, |
| | | GH, | Œ, | KE, | LS, | MW, | MΣ, | NA, | SD, | SL, | S2, | TΣ, | UG, | 2M, | ZW, | AM, | λ2, |
| | | BY, | KG, | K2, | MD, | RU, | IJ, | TM | | | | | | | | | |
| TOI | 3.00 | est : | TATEO | | | | | | | to o | 500 | 2002 | 0.0 | | | 0000 | 220 |

BRIGHIT APPM. INFO: 10, 10, 10, 10 and 10, 10, 10 and 10, 10, 10 and 10, 10, 10 and 10, 10 and 10, 10 and 1

(Mocal) specimen labeled with novel fluorescent dye, and preparation method|
655981-84-5 CARMS
[1,2,5]Datailoo(3,4-c]pyridine-5-carboxylic acid,
4,7-his(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

RN 921934-98-7 CAPLUS

CN \$\beta-\text{Rankine}, \text{M=[4,7-\text{bis}(4-\text{methoxyphenyl})[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]oxrbonyl]-, 2,5-\text{dioxo-l-pyrrolidinyl ester (CA INDEX NAME)}

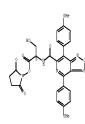
921935-02-6 CAPLUS

L-Alanine, N-[(4,7-bis(4-netboxyphenyl)[1,2,5] oxadiazolo(3,4-c)pyridin-6-yl)carbonyl)-3-sulfo-, 2,5-dioxo-1-pyrrolidinyl ester (CR INDEX NAME)

Absolute stereochemistry.

RN 921935-04-8 CAPLUS

L-Serine, N-[(4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c)pyridin-6-yl]carbonyl]-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)



RN 921935-06-0 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5] oxadiazolo(3,4-c]pyridin-6yl]carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CR INDEN NAME)

If 100.443-5-5-6
RE: BCT (Reactant); RACT (Reactant or reagent)
(Biol. specimen labeled with novel fluorescent dye, and preparation method)
RM 102148-25-6 CARGS
CM (1.2.5)Datainoslo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, propyl exter (CA INGEN NAME)

II 955'80-01-88 84'963-00-1P 921936-91-88
\$2025-90-30 921550-03-79 52025-90-30
RE: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI RU NCT [Reactant] reagant]

(Reactant or reagant)

(miol. specimen labeled with novel fluorescent dye, and preparation method)

70 (S21-2)-2 CAPUNO

CM (1,2,5)Osation[0], 4-clpyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)- (CA DODEX NOME)

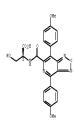
857048-00-1 CAPLUS
[1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid,
4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

921935-01-5 CAPLOS

L-Alamine, N-[[4,7-bis(4-methoxypkenyl)[1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INDEX NAME)

RN 921935-03-7 CAPLOS CN L-Serine, N-[[4,7-bis(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NRME)



RN 921935-05-9 CAPLUS
CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5] oxadiazolo(3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INDEX NAME)

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 AMSHER 13 OF 81 CARKUS COPFRIGHT 2011 Acts on STW
ACCESSION MUMBER:
2007:118948 CAPLOS Full-cost
148:27194
1THE:
Fluorescent dye-bound diagnostic agent for labeling
antibody, and diagnostic method using it
Looks, Shinichizo
PARENT ASSIGNEE(S):
Japan
SQUICE:
Japan
COUNTRY
DOCUMENT TYPE:
DOCUMENT TYPE:
DATE OF THE OWNER OF THE OWNER OWNER
LAMICAGE:
Japansee
FAMILY ACC. MUMN. COUNT: 1

DOCUMENT TIPE: --LANGUAGE: Ja
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

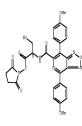
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|-----------------|----------|
| | | | | |
| JP 2007315779 | A | 20071206 | JP 2006-142648 | 20860523 |
| PRIORITY APPLN. INFO.: | | | JP 2006-142648 | 20860523 |
| OTUPD COMBOT/C). | Ma pra | 140,97104 | | |

- R SOMECIS: MRSRI 148:27194
 A diagnostic agent is provided, which uses a fluorescent dye with high
 fluorescence intensity, and exhibits a high labeling rate to an antibody. The
 diagnostic agent comprises at least an antibody and a fluorescent dye for
 labeling the antibody, wherein the fluorescent dye possesses a clocation part
 consisting of an organic electroluminescent (EU) dye and a binding part for
 hinding with the antibody. The diagnostic agent enables to improve the
 labeling rate to an antibody in comparison with the conventional method, and detect an antigen with high sensitivity by a high fluorescence intensity even in a solid state. Also provided is a diagnostic method using this diagnostic
- agent. 921554-96-99 521935-64-86 921555-96-99 550394-50-99

\$2394-3-0-08 RL ABG (Analytical reagent use); SRM (Synthetic preparation); AMSI (Analytical study); PREP (Preparation); USES (Uses) (fluorescent dys-bound diagnostic agent for labeling antibody, and diagnostic nethod) 921934-98-7 CAPLUS

- β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME) CN

- 921935-04-8 CAPLUS
- L-Serine, N-[[4,7-bis(4-nethoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



- RN 921935-06-0 CAPLUS
 CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5] oxadiazolo(3,4-c]pyridin-6-yl]carbonyl]-L-seryl-, 2,5-dioxo-1-pyrrolidinyl ester (CR INDEX NAME)

- CN Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo-, 1-(2,5-dioxo-1-pyrrolidinyl) ester (CA INDEX NAME)

- II 85339-85-82 855781-64-80 85788-80-02 851939-67-69 921535-82-79 951935-85-97 955996-45-70
- RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI
- (Reactant or reagent)

 (Reactant or reagent)

 (fluorescent dye-bound diagnostic agent for labeling antibody, and diagnostic method)
- (linorescent dye-bound diagnostic agent for label diagnostic method) 855181-83-8 CAPLUS [1,2,5] Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl) (CA INDEX NAME)



- 855781-84-9 CAPLUS
 [1,2,5]Oxadiazolo(3,4-c]pyridime-6-carboxylic acid,
 4,7-bis(4-methoxypbenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



- 857048-00-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

- 921934-97-6 CAPLUS
- β-Alanine, N-[[4,7-bis(4-methoxyphenyl)(1,2,5)oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME) CN

- RN 921935-03-7 CAPLOS
 CN L-Serine, N-[[4,7-bis(4-methoxyphenyl)(1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INGEN NAME)

Absolute stereochemistry.

921935-05-9 CAPUUS L-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INDEX NAME)

- RN 959396-49-7 CAPLUS
- CN Alanine, N-[(4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INDEX NAME)



- L29 MISWER 14 09 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2007:319540 CAPLUS <u>Full-text</u> DOCUMENT NUMBER: 146:521701
- TITLE: AUTHOR(S):
- CORPORATE SOURCE:
- 146:521701

 4,7-Diphenylisobennofuran: A Useful Intermediate for the Construction of Phenyl-Substituted Acenes Rainbolt, Junes Eric, Miller, Glen P. Department of Chemistry and Material Science Program, University of New Bampshire, Durbam, WH, 03824, USA Journal of Organic Chemistry (2007), 72(8), 3020-3030 (DMRN) 002881, ISSN: 0022-3030
 American Chemical Society SOURCE.

- PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): Journal English CASREACT 146:521701



- AB The formation and subsequent reactivity of previously unknown 4, 7diphemylisobennofuran (I) is reported. The Diels-Alber reaction between I and
 p-bennoquinone in boiling glacial acetic acid yields an unprecedented exo.exo
 anti dual cycloadus, product II is excellent yield and with 100%
 diastereoselectivity. Differences between the reactivities of I and the more
 common 1,3-diphemylisobennofuran are highlispheen. Reactive I is willised to
 form new three-, four-, and five-ting access, and the latter compound is
 reacted with [60] fullerene to produce new [60] fullerene-acces adducts.

 11 #6000.150
- ASTRON.SS-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or respect) (preparation), rear (requires, one (Reactant), one (preparation and Diels-Alder reactions of 4,7-diphenylisobensofuran) RM 401604-33-9 CARUS

 CN Isobensofuran, 4,7-diphenyl- (CA NDEX NDME)



L29 ANSWER 15 OF 01 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2007:167743 CAPLUS Fell-text

DOCUMENT NUMBER: 146:231129

140:231129

Marking agents containing organic EL colorants, their detection, and spray devices

Isobe, Shinichiro

Japan

Jpn. Nokal lokkyo Noho, 41pp.

COMBN: 2003AP

Patent TITLE:

INVENTOR (S)

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE: J
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION: Japanese

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|--------|------------|------------------|---|---------|
| JP 2007039633 | λ | 20070215 | JP 2005-377814 | | 2005122 |
| PRIORITY APPLN. INFO.: | | | JP 2005-192046 A | ŧ | 2005063 |
| OTHER SOURCE(S): | MARPAT | 146:231129 | | | |

The marking agents contain solvents and 21 kinds of organic BL fluorescent colorants comprising 5-membered ring compds. having conjugated system and colorants comprising 5-membered ring compds. having conjugated system and containing 21 kinds of hetero atoms, Se, or B. Objects are marked by apraying with the marking agents, and deposited marking agents are detected by irradiating excitation light, thereby inducing light emission from the fluorescent colorants. Thus, an explow-emitting marking agent contained MeOR and an activated eater of oxadiazologyzidine I.

RI: INT [Industrial manufacture]; RCI (Reactant); TEM (Technical or empineered material use); PREP (Preparation); RMCI (Reactant or reagent); USES (USES) (USES)

(marking agents containing organic EL colorants, their detection, and spray devices)

908866-54-6 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS TEAT CITE THIS RECRED CISTUMES)

REFERENCE COUNT: 45 THERE ARE 45 CHIED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITETRIOS AVAILABLE IN THE FE FORMAT

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use): PREP (Preparation): USES (Uses)

(marking agents containing organic BL colorants, their detection, and spray

devices) 908866-55-7 CAPLUS

Bthanesulfonic acid, 2-[[[4,7-bis(4-nethylphenyl][1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]amino]- (CA INDEK NRME)

924280-67-1 CAPLUS [1,2,5] Oxadiarolo(3,4-c) pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, propyl ester (CA INDEX NAMS)

RL: RCT (Reactant); RACT (Reactant or reagent) (marking agents containing organic EL colorants, their detection, and spray

908866-53-5 CAPLUS

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)- (CA INDEX NAME)



L29 ANSWER 16 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN

ARMIS OWPRIGHT 2011 Acc a STW 2007:140-150 (ACC) Control of Contro AUTHOR(S): CORPORATE SOURCE:

CODEN: RRCHAX: ISSN: 0035-3930

PUBLISHER: Editura Academiei Romane DOCUMENT TYPE:

LANGUAGE:

NEME: Journal LONGE: English Fluorescent conjugates are widely used in biol. and medicine. The authors used for this study hen ovalbumin and bovine casein. The conjugation reaction

of proteins with 4, 1-diptempl-1, 2, 5-omaziasolo], 4-clpyridize-6-catboxylic caid (ODCA) was performed with dicyclobesylcarbodinize (DDC) and N-thytocylmal-dimine (NDM). Plorescent conjugates were separated by gal chromatog, and organic solvent precipitation Purified flowerscent conjugates were subsequently samiyared by flowrately and by solvin decedys slutter-polyrerylamide gel electrophoreasis (DGC-PAGE). These samiyars showen that the selection conjugates are consistent exaction yielded flowrescent conjugates at this dispuss. The sincepat emission was obtained with the ovalimnin conjugates. The limits of detection by electrophoreasis in presence of detection by electrophoreasis in presence of detection by "A-Tuphenprill_LS, Sjoxadiatolo[3, 4-clpyridine-6-carboxylic acid, flowerscent bioconjugates are last reported. 25%; 35.0%, 47.-Tuphenprill_LS, Sjoxadiatolo[3, 4-clpyridine-6-carboxylic acid, flowerscent bioconjugates are last reported at the protection of the prot of proteins with 4,7-diphenyl-1,2,5-oxadiazolo[3,4-c]pyridine-6- carboxylic

study); PREP (Preparation| (preparation of conjugates of casein and ovalbumin with diphenyl[1,2,5]oxadiazolo[3,4-c]pyridinecarboxylic acid and study of their fluorescent properties and SDS-PAGE)

85731-38-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA INDEX NAME)



SS:11-30-8
END (Reactant); RACI (Reactant or respect)
[preparation of conjugates of casein and ovalbomin with
dipheny[11,2],Somadiano[0,4-beypridimecarboxylic acid and study of
their fluorescent properties and SIG-RRGE)
SS:11-32-0 (CRGE)
[1,2,5]Dandiano[0,4-c]pyridime-6-carboxylic acid, 4,7-diphenyl- (CR
THORY HAME)



14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

ANSWER 17 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN SSION NUMBER: 2007:116984 CAPLUS Full-text MENT NUMBER: 146:180299 DOCUMENT NUMBER:

TITLE: Development of organic electroluminescence dye indicator for biomolecules INVENTOR (S): Isobe, Shinichiro PATENT ASSIGNEE(S): PCT Int. Appl., 94pp SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | | | | | KIN | | DATE | | | APPL | | | | | | ATE | |
|------------|--------------|------|------|-----|-----|-----|--------|------|-----|------|------|------|-------------------|-----|-----|------|----|
| WO | 2007 | 0136 | 01 | | | | | | | | | | | | | | |
| | И: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | λZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | C |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DΣ, | EC, | EE, | EG, | ES, | FI, | GB, | G |
| | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KM, | KN, | К |
| | | KR, | KΣ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | М |
| | | MW, | MX, | MZ, | NA, | NG, | NI, | NO, | NΣ, | OM, | PG, | PH, | \mathbb{PL}_{r} | ΡĪ, | RO, | RS, | Ri |
| | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | IJ, | ΙM, | ΙN, | IR, | П, | TZ, | UA, | U |
| | | US, | UΣ, | VC, | VN, | ΣA, | 2M, | 2W | | | | | | | | | |
| | RW: | ΑĪ, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | I |
| | | IS, | II, | LΓ, | LU, | LV, | MC, | NL, | PL, | PI, | RO, | SE, | SI, | SK, | TR, | BF, | В |
| | | CF, | CG, | CI, | CM, | GA, | ŒĬ, | GQ, | G₩, | ML, | MR, | NE, | SN, | ΓD, | ΤG, | B₩, | G |
| | | GM, | KE, | LS, | MW, | MZ, | MA, | SD, | SL, | S2, | IZ, | UG, | ZM, | 2М, | AM, | AΣ, | B. |
| | | | | MD, | | | | | | | | | | | | | |
| EP | 1932 | | | | | | | | | | | | | | | | |
| | R: | λī, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | I |
| | | | | | | | | | | | | | | | | IR | |
| | 2008 | | | | | | | | | | | | | | | | |
| | 2008 | | | | | | | | | | | | | | | | |
| CN | 1012 | 7309 | ő | | A | | 2008 | 0924 | | | | | | | | 0080 | |
| CORIT: | APP | CN. | INFO | . : | | | | | | | | | | | | 0050 | |
| | | | | | | | | | | | | | | | | 0060 | |
| | | | | | | | | | | WO 2 | 006- | JP31 | 5008 | | W 2 | 0060 | 72 |
| JPD C | p companyon. | | | | MAD | TIG | 1.46 - | 1202 | 99 | | | | | | | | |



Abole electroluminescence dye indicators having spacer regions for nucleic acids and proteins have been developed. The EL dyes have general structures I (RL,R4 = R, halo, alkyl, alkenyl, alkony, OR, CM, sulforyl, aromatic, heterocyclic; R2,R3 = R1, thiophene, furan, pyroole, inidiazole, oxazole, thiazole, pyrazoles, pyridines, sulforyl aryl; X = N, S, O, Se, B with[out] substitution; Y = CRM, N, N,R4 ? = alkyl, alkyrayl; An = CL, Ex-, L, CT3SO1-, B24-, P26-]. The EL dyes addnl. comprise a spacer region -(CER')p-X-

(CEN''19- (X = NECOO, COME, COO, SOURH, NEC(NHINH, O, S, NP, CE:CH, CLIPbondC, Ar, CO-A-HR]; R = Augly lithouth aromatic rings and they can conteain sulforyl, OH, quaternary amines, COOS; Ar = aryl; p, q = 0.apprx. 20; p + q ≥ 1), maino caid, or peptides (such as peptides containing optatic acid, 2-maino-1-sulfonsleny) propancic acid, 2-maino-1-sulfonsprepanic acid, 2-maino-1-sulfonsprepanic acid, 2-maino-1-sulfonsleny) propancic acid, 2-maino-1-sulfonsprepanic acid, 2-maino-1-sulfonsprepanic acid, 2-maino-1-sulfonsprepanic acid, 2-maino-1-sulfonsleny) propagation acid, 2-maino-1-sulfonsleny propaga anousers in specific manning process they include oligonicalectide probes, muclectide applification primes or terminators, MM mol. beacons, proteins (antigens, haptens and antibodies), biotin or avidins, tag peptide, lectin, glycoproteins, horzones and receptors. The systems using electrophoresis are especially claimed as the method to detect the indicator-labeled himomals. Syntheses of some specific EL dyes and labeling of oligo DNM and proteins were demonstrated. demonstrated.

biomols.)
921935-6-0 CAPRUS
[-Alanine, N.-([4,7-bis(4-methoxyphenyl][1,2,5]oxadiszolo[3,4-c]pyridin-6-yl]carbonyl]-1-seryl-, 2,5-dioxo-1-pyrididinyl ester (CA DUEX WAME)

II 321835-05-90 831335-07-12

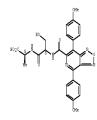
NECOTION SET SALESCONTEST

RELECT (Reactant); SPM (Synthetic preparation); PREP (Preparation); RACI
(Reactant or resgent)

(as spacer; development of organic electroluminescence dye indicator for

L-Alanine, N-[[4,7-bis(4-methoxyphenyl][1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-L-seryl- (CA INDEX NAME)

Absolute stereochemistry.



- 921935-07-1 CAPLUS
 [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonyl chloride,
 4,7-his(4-methoxyphenyl)- (CA INDEX NBME)



- II SIXMA-02-NS MAXIS-A-4-P SIXMS-03-NF
 RE ANG (Realytical reagest use); SRE (Systhetic preparation); AMSI
 (Amalytical study); PRSP (Preparation); USES (Uses)
 (development of organic electroluminescence dye indicator for biomols.)
 RM 92135-02-6 CAPLUS
 L-Lalaine, H-(4,7-bis(4-methoxyphenyl1[1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo-, 2,5-diomo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN 921935-04-8 CAPLUS
 CN L-Serine, N-[[4,7-his(4-methoxyphenyl)(1,2,5)oxadiazolo(3,4-c)pyridin-6-yl)carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

- II %0789-40-45 600781-40-40 407030-40707 \$1975-47-40 9025-32-70 501975-51-50 \$20195-50-70 *2105-60-50 Bi: RCT (Peactant); SRM (Symthetic preparation); PREP (Preparation); RRCT No. RCI [Reactant]: SRM [Synthetic preparation]: PREP [Preparation]: RRCI
 [Reactant or reagent]
 (development of organic electroluminescence dye indicator for biomols.]

 No. SST01-20-3 CRPHUS
 (1.2.5) Small and [O.4.4-c] pyridine-6-carboxylic acid,
 4.7-bis(4-methoxyphenyl) - (CA INDEX NOME)



- | RN | 855781-84-9 CAPLIS | (1,2,5)@xadiacolo[3,4-c]pyridine-6-carboxylic acid, | 4,7-his(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA NUREX NAME)



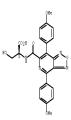
- 857048-00-1 CAPLUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, ethyl ester (CA INDEX NAME)

- 921934-97-6 CAPLUS
- β-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5]oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]- (CA INDEX NAME) CN

- RN 921934-98-7 CAPLUS
- CN β-Alanine, N-[[4,7-bis(4-methoxyphenyl)]1, 2,5]oxadiazolo[3, 4-c]pyridin-6-yl]carbonyl]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

- RN 921935-01-5 CAPLUS
 CN L-Alanine, N-[[4,7-bis(4-methoxyphenyl)[1,2,5] oxadiazolo[3,4-c]pyridin-6-yl]carbonyl]-3-sulfo- (CA INNEX NAME)

Absolute stereochemistry.



- RN 921935-08-2 CAPLUS
 CN [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid,
 4,7-his(4-methoxyphenyl)-, 2-carboxyethyl ester (CA INDEX NAME)

- OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
- REFERENCE COUNT:
- 1 INDEE ARE 1 CAPADO REJORDS INDICATED IN SECURE
 (1 CITINES)
 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 18 OF 81 CAPLOS COPPRIGHT 2011 ACS on STN
ACCESSION MOMBER: 2007:5399 CAPLOS Fall-text
DOCMORATI NUMBER: 146:138245
IIILE: Cell staining method using intercalator fluorescent

- INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:
- dye
 Isobe, Shinichiro
 Japan
 Jpn. Kokai Tokkyo Koho, 33pp.
 CODEN: JKXXAF DOCUMENT TYPE: Patent Japanese LANGUAGE: Je FAMILY ACC. NUM. COUNT: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| JP 2007006788 | λ | 20070118 | JP 2005-192066 | 20050630 |
| RIORITY APPLN. INFO.: | | | JP 2005-192066 | 20050630 |

- PRIORITY APPMA. INFO.:

 AB A cell staining method is provided, which enables a fluorescence measurement even with a microorganism test sample in a dry state. In enthod comprises using as a fluorescent dye an intercalator to be used for detecting a double-stranded MDM, which possesses a binding part for ininding with a double-stranded MDM, and at least one coloring part consisting of an organic EL (electroluminescent) dye and bound with the binding part through a connection part to stain microorganism in a test sample, and measure fluorescence of the microorganism.

 IT 275704.2757 800124.74.17 800124.75.85 80024.74.17 800124.75.85 80024.74.17 800124.75.85

SNCS(470.15)

RE: ABO (Rablytical reagent use); SPN (Symthetic preparation); MNST (Raslytical study); PRSP (Perparation); SSS (Uses)

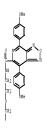
(cell staining sethod using intercalator floorescent dye)

85538-45-0 (ADMUS

[1,2,5] Okandistolo[3,4-c]pyridise-6-carboxanide,

N,W'=[9,1]-sharkosendiy[his [ethy]een(oxy-2,1-ethanediy1)]] bis[4,7-his(4-sethoxypheny1)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

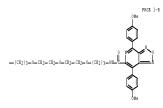
PAGE 3-A

- RN 880134-74-7 CAPLUS
 CN [1,2,5]Oxadis nolo[3,4-c]pyridine-6-carboxamide,
 W-[3-[2-[2-[3-[1-C]-2-C-2-aninopropay]elboxy]ethoxy]propyl]-3,6,7,8-tetrahydro-1,3,6,8-tetranoubeno(lan)[3,8]phenanthrolin-2(1B)yllpropxy]ethoxy]ethoxy]ethoxy[propyl]-4,7-bis (4-netboxypbenyl]-,
 2,2,2-trifluoroscetafe [1:1] (CA INDEX ROME)

- CRN 880134-73-6 CMF C54 H61 N7 OL4

PAGE 1-A



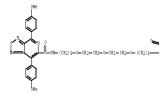


CM 2

CRN 76-05-1 CMF C2 H F3 O2

- BN 880134-15-8 CAPLUS
 CN [1,2,5]Omadiazolo[3,4-c]pyridin-6-carboxamide,
 N,N'-(1,3,6,8-tetrapque-1,3,6,8-tetracomberso[lim][3,8]phenanthroline2,7-airjh is,6,7-propaneling/our-2,1-tethanediylony-2,1-ethanediylony-3,1propanediyl]bis[4,7-his(4-methoxybenyl)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



PAGE 1-C



RN 896447-93-1 CAPLUS

(CA IDLEX NAME)

(CA IDLEX NAME)

4,7-bis(4-methoxyphenyl)-N-{2-([10-([2-(methylamino]ethoxy]methyl)-9-anthracenyl]methoxy)ethyl]-, 2,2,2-trifluoroacetate (1:1) (CA IDLEX NAME)

- CRN 896447-92-0 CMF C41 H39 N5 O6

PAGE 2-A

PAGE 1-A

CM 2

II 305/98[-03-4]
RL: RCT (Reactant); RRCT (Reactant or reagent)
(cell staining method using intercalator floorescent dye)
RN 855791-44-0 CRUID
CN [1,2,5]Okaniarolo[3,4-c]eyridine-6-carboxylic acid,
4,7-bis(4-methoxypbenyl)-, 2,5-diozo-1-pyrrolidinyl ester (CA INDEX NAME)

- L29 MASKER 19 OF 81 CAPLUS COMPRISET 2011 ACS on STN
 ACCESSION NUMBER: 2006:1115838 CAPLUS [Pull-text]
 DOUBLER INTERER: 145:20588

 AUTHOR(S): Simplet Fission for Dye-Sensitized Solar Cells: Can a Sutable Sensitizer Be Found?

 AUTHOR(S): Paci, Irina; Johnson, Justin C., Chen, Xudong: Rana, Geets; Repovic, Dusks; David, Doublat;, Hosis, Arthur J.; Rather, Mark A.; Michi, Zosef
 CORPORATE SOURCE: Department of Chemistry and Materials Research Center, Necthwestern University; Moranton, IL, Globa, USA

 SOURCE: Journal of the American Chemical Society (2006), 128(51), 1564-16553

 COEN: JACAN; ISSN: 0002-1863

 PUBLISHER: American Chemical Society
 DOUNDANT TIPE: Journal
 LANGUAGE: Sensity of dye-sensitized photovoltaic cells are possible by using dyes opashe of simplet fission into 2 triplets, thus producing 2 electron-bole pairs from a single photon. In addition to derivs, of large alternant hydrocarbons, those of hiradicals are also candidates for a favorable ordering of excited-state energy levels, SICI2, SICI) 22(11), A large number of favorable structures was examined by the semispirical DPP method and some also by the time-dependent IFT method. Several candidates were identified for exptl. examination

 If Vicks 5:5:9
- identified for Capi-IT #07604-53-9 RL: PRP (Properties)

(sensitizers for improved dye-sensitized solar cells) 407604-53-9 CAPLUS

Isobenzofuran, 4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 40 THERE ARE 40 CAPLUS RECORDS THAT CITE THIS

RECORD (41 CITINGS)
75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 20 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NU

DOCUMENT NUMBER: TITLE:

ARUS COPYRIGHT 2011 MCS on STN
2006:1256188 CAPUS <u>Full-test</u>
146:184235
Synthesis, structure, and resolution of exceptionally
twisted pentacenes
Lo, Jun; Bo, Douglas M.; Voqelaar, Nancy J.; Kranl,
Christina M.; Fernhard, Stefan; Byrne, Meal; Kim,
Laura R.; Pascal, Robert A., Jr.
Department of Chemistry, Princeton University,
Princeton, M., 06544, USA
Journal of the American Chemical Society (2006),
126511, 17034-17050

CORPORATE SOURCE:

SOURCE:

128(51), 17043-17050 CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: LANGUAGE:

Journal English CASREACT 146:184235

OTHER SOURCE(S):



9,10,11,20,21,22-Hexaphenyltetrabenzo(a,c,1,n)pentacene [I; R = H] and a di-He derivative I (R = He) were prepared by the reaction of 1,3-diphenylphenanthro[9,10-c)furan with the bisaryne equivalent generated from

1,2,4,5-tetrahrono-3,6-diarylbensenes in the presence of Suli, followed by decoypenation of the double adducts with low-valent titanium. I are bright red solids with a strong orange floorescence in solution The x-ray structures of these compds, show them to be the most highly twisted polycyplic aromatic hydrocarbons known. I (8 = 8| has an end-to-end twist of 104°, and the two crystallog, independent nois. of [8 = 86| has returned to 104°, and 143°, Both nois, were resolved by chromatog, on chiral supports, and the pure Both mols, were resolved by chromatog, on chiral supports, and the pure enantioners have extremely high sp. rotations [for I (R = B), (glD = 7400°; for I (R = Me), 5500°), but the mols. racemize slowly at room temperature (AG.thermod.rac = 24 kcal/mol). Both the exptl. geometry and the observed racemization barrier for I are in pool agreement with computational studies of the mol. at a variety of levels. Attempts to prepare I (R = B) by reaction of tetraphenylbensyne with 9,10,12,13-tetraphenyl-11-onacyclopenta(b)triphenylene (a twisted isobenodizan) gave no adducts, and attempts to prepare tetradecaphenylpentacene by reaction of benaphenylisobenoduran with hisaryme equivalent cave only moscoaddocts.

equivalent gave only monoadducts. II = 1.5613 - 87 - 7

RE: RCI (Reactant); RACI (Reactant or reagent)
(cyclization of hexaphenylisobenzofuran with tetrahronodiphenylbenzene in preparation, crystal/nol. structure, and resolution of twisted

16619-87-7 CAPLUS

CN Isobenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS

33 REFERENCE COUNT:

RECORD (16 CITINGS)
THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 MISSER 21 OF 81 CAPLUS COPPELGET 2011 MCS on STN
ACCESSION MOMERS:
1000MENT MINEER:
115:419151
DIVENTOR(S):
Perparation of 2,1,3-bennoxadianole derivatives as
companic electroluminascent naterials
DIVENTOR(S):
Qin, Yong, Li, Jasenen, Li, Takeni; Gao, Yudi
PAIDHIT ASSIGNEE(S):
Tainghas University, Peop. Rep. China; Beijing
Movosymes Co., Ltd.
SOURCE:
Paning Thanali Sheering Gongkai Stmoningshu, 25pp.
TOOMENI TUTE:
Pater CHANGEY
P

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. MIN. COUNT: 1

CN 100425599 PRIORITY APPLN. INFO.:

PATENT NO. KIND DATE APPLICATION NO. CN 1840525 CN 2005-10135385 OTHER SOURCE(S): CASREACT 145:419151; MARPAT 145:419151

AB The title 2.1.3-benzoxadiazole derivs. I (wherein n = 1-4; Ar and Ar' = The title 2,1,3-bennowalisable derivs. I [wherein n = 1-4; Ar and Ar' = independently B, (un)substituted (heterolary), or fused (heterolary); with the proviso that Ar and Ar' = B; Rl and R2 = independently halo, (un)substituted alkyl, alkowy, etc.] were prepared as organic electroluminescent naterials. For example, If was prepared in a multi-stee synthesis. The organic electroluminescent device containing II showed brightness of 230 od/m2. \$1278-6-4-9. \$12

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation of 2,1,3-benzoxadiazole derivs. as organic electroluminescent materials)

RN 912278-64-9 CAPLUS

2,1,3-Benzoxadiazole, 4,7-bis([1,1'-biphenyl]-4-yl)- (CA INDEX NAMB)



RN 912278-65-0 CAPLUS CN 2,1,3-Benzoxadiazole, 4,7-di-1-naphthalenyl- (CA INDEX NAME)



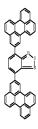
912278-66-1 CAPLUS 2,1,3-Benzoxadiazole, 4,7-di-2-naphthalenyl- (CA INDEX NAME)



2,1,3-Benzoxadiazole, 4,7-di-9-anthracenyl- (CA INDEX NAME)

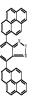


RN 912278-68-3 CAPLUS CN 2,1,3-Benzoxadiazole, 4,7-di-2-perylenyl- (CA INDEX NAME)

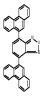


RN 912278-69-4 CAPLUS

2,1,3-Benzoxadiazole, 4,7-di-1-pyrenyl- (CA INDEX NAME)



RN 912278-70-7 CAPLOS CN 2,1,3-Benzoxadiazole, 4,7-di-9-phenanthrenyl- (CA INDEX NAME)

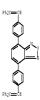


RN 912278-71-8 CAPLUS 2,1,3-Benzoxadiazole, 4,7-bis(4-phenoxyphenyl) - (CA INDEX NAME)



RN 912278-72-9 CAPLUS

2,1,3-Benzoxadiazole, 4,7-bis[4-(2,2-diphenylethenyl)phenyl]- (CA INDEX

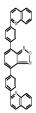


RN 912278-73-0 CAPLUS

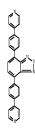
CN 2,1,3-Benzoxadiazole, 4,7-bis(4b,8a-dihydro-9,9-dioctyl-9H-fluoren-3-yl)-(CA INDEX NAME)



912218-76-3 CAPLUS Quinoline, 2,7'-[2,1,3-benzoxadiazole-4,7-diyldi-4,1-phenylene)his- (9CI) (CA INDEX NAME)



RN 912278-77-4 CAPLUS CN 2,1,3-Benzoxadiazole, 4,7-bis[4-(4-pyridinyl)phenyl]- (CA INDEX NAME)





RN 912278-81-0 CAPLUS
CN 2,1,3-Benzoxadiazole, 4-[1,1'-biphenyl]-4-yl-7-[4-(2,2-diphenylethenyl|phenyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L29 MISWER 22 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:913730 CAPLUS ** **E011-b-xxt** DOCUMENT NUMBER: 145:309967**

Protein detection method using fluorescent dye Isobe, Shinichiro; Waki, Michinori TITLE: INVENTOR(S):

PATENT ASSIGNEE(S): Japan Jpn. Kokai Tokkyo Koho, 36pp. SOURCE:

CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

| PAT | ENT I | NO. | | | KIN | D | DATE | | - 1 | 4PPL | ICAT | ION | NO. | | Di | ATE | |
|-----|---------------|------|-----|-----|-------------|-----|------|------|------------------|---------------|------|-----|-----|-----|----------|------|-----|
| | | | | | | - | | | | | | | | | - | | |
| JP. | 2006: | 2347 | 72 | | A | | 2006 | 0907 | | JP 2005-53798 | | | | | | 0050 | 228 |
| WO. | WO 2008018129 | | | | A1 20080214 | | | - 1 | WO 2006-JP315751 | | | | | | 20060809 | | |
| | ₩: | ΑE, | AG, | AL, | AM, | AT, | AU, | λ2, | BA, | BB, | BG, | BR, | BW, | BY, | BΣ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | BB, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HN, | HR, | BU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KP, |
| | | KR, | KΣ, | LA, | LC, | LK, | LR, | LS, | Lī, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MI, |
| | | MW, | MX, | MZ, | NA, | NG, | NI, | NO, | NΣ, | OM, | PG, | PH, | PL, | PI, | RO, | RS, | RU, |
| | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | IJ, | IM, | TN, | IR, | П, | Τž, | UA, | UG, |
| | | US, | UΣ, | VC, | VN, | ZA, | 2M, | ZW | | | | | | | | | |
| | RW: | ΑĪ, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IB, |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | BJ, |
| | | CF, | CG, | CI, | CM, | GA, | Ωĭ, | GQ, | G₩, | ML, | MR, | NB, | SN, | TD, | TG, | В₩, | GH, |
| | | GM, | KE, | LS, | MW, | MZ, | MA, | SD, | SL, | SZ, | Τ2, | UG, | ZM, | 24, | AM, | λũ, | BY, |
| | | KG. | KZ. | MD. | RU. | IJ. | TM | | | | | | | | | | |



308866-53-5 RL: RCI (Reactant); RACI (Reactant or reagent)

(protein detection method using fluorescent dye) 908866-53-5 CAPRUS [1,2,5]Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl) - (CA INDEX NAME)



RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

Mi: Ni. (Beactant): SWM (Synthetic preparation): PMSF (Preparation): PMSF (Recatant or reagent) (protein detection method using fluorescent dye) 900866-54-6 CAPLUS (1,5)Okadiatolo[3,4-c]pyridine-6-centoxylic acid, 4,7-his(4-methylphenyll-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NOME)



| OS.CITING REF COUNT: | 1 | THERE ARE 1
(1 CITINGS) | CAPLUS RECORDS 1 | THAT CIT | E THIS RE |
|-------------------------|-------|----------------------------|-------------------|----------|-----------|
| L29 ANSWER 23 OF 81 CA | PLUS | COPYRIGHT 20 | 111 ACS on SIN | | |
| ACCESSION NUMBER: | 2006: | 679269 CAPI | US Failt-text | | |
| DOCUMENT NUMBER: | 145:9 | 7428 | | | |
| TITLE: | Devel | opment of fl | uorescent dsDNA-i | intercal | ating |
| | reage | nts for the | application to ge | ne dete | ction |
| INVENTOR(S): | | , Shinichire | | | |
| PATENT ASSIGNEE(S): | Japan | | | | |
| SOURCE: | | Kokai Tokkyo | Koho, 35 pp. | | |
| | CODEN | : JKKKAF | | | |
| DOCUMENT TYPE: | Paten | t | | | |
| LANGUAGE: | Japan | ese | | | |
| FAMILY ACC. NUM. COUNT: | 2 | | | | |
| PATENT INFORMATION: | | | | | |
| | | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
| | | | | | |
| JP 2006180835 | A | 20060713 | JP 2004-380646 | | 20041228 |
| US 20080101176 | Al | 20080501 | US 2007-794228 | | 20070626 |
| PRIORITY APPLAN. INFO.: | | | JP 2004-380646 | A | 20041228 |
| | | | WO 2005-JP19292 | W S | 20051020 |

PRICEITY APPM. 1870:

WO 2002-3919/Se 2 20061100
ASSIGNMENT HISTORY FOR US PATENT ANTHERS IN LISUS DISPLAY FORMENT
ASSIGNMENT HISTORY FOR US PATENT ANTHERS IN LISUS DISPLAY FORMENT
B. Noveal Fluorescence disENR-intercalating reagents based on organic EL dye for the
application to gene detection have been developed. The intercalating stagent
generates fluorescence with shorter sweelength at the intercalating stage that
that at free state. An assay ayatem on a microsuray set-up has been developed
for the application of the intercalating assay to gene detection. Sample
datMR solution is mixed with the solution containing the intercalating regered
and the reaction nixts. are spotted on the assay media substrate for
determining the fluorescent intensities. In Gorganic EL dyes have condensed
ring structures consisted of 5- (containing betro atoms such as Se or 8,
asoles or initiationly of remembered ring containing conjugated double bonds.
The birding regions of the dyes are single or multi atomatic rings such as
anthracene, phenanthrace, pyrene, fluorees, hiphenylese, naphthalene (dimides
and inities) or phenyldinining groups. A maphthalene dimide intercalater and
an anthracene intercalater were synthesized and their spectrosettic properties
and inities) or phenyldining swee studied. Pepting intercalater containing
the organic EL dye was also prepared
II contained to the containing the containing the organic EL dye was also prepared
II contained the containing the containing the organic EL dye was also prepared
II contained the containing the containing the organic EL dye was also prepared
II contained the containing the containing the organic EL dye was also prepared
II contained the containing the containing the organic EL dye was also prepared
II contained the containing the c

(development of fluorescent dsDNA-intercalating reagents for

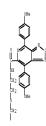
splication to gene detection)

RM 8557a1-65-0 (Agrandian Jol J. 4-clpyridin-6-carboxamide,

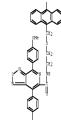
N,N'-[9,10-anthracemediylbis[methylene(exy-2,1-ethanediyl))]bis[4,7-bis(4-

methoxyphenyl)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



(1,2.5)Oxadiazolo(3,4-c)pyridine-6-carboxamide.
$$\label{eq:constraints} \begin{split} &(s,s) \text{ oscalator}(s,s-c) \text{pyrianne-o-catoranioe}, \\ &(s,N)^* = [1,3,6,8-\text{tetrahydro-1},3,6,8-\text{tetracorobenio}(\text{lim})[3,8] \text{ phenanthrolin-2}, ?-\\ &(\text{iyl}) \text{ bis}(s|\text{inin-3},1-\text{propaned}(\text{iyl-4},1-\text{piperazined}(\text{iyl-3},1-\text{propaned}(\text{iyl})) \text{ bis}(4,7-\text{bis}(4-\text{nethoxyphenyl})-(9CI) \\ &(\text{CA NOEX NAME}) \end{split}$$

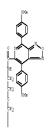
PAGE 1-C

896447-93-1 CAPLUS

(7.4,5]Oxadiazolo(3,4-c)pyridine-6-carboxanide, 4,7-bis(4-methoxypbenyl)-N-[2-[(10-[(2-(methylanino)ethoxy]methyl)-9-anthracenyl]methoxy]ethyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CRN 896447-92-0 CMF C41 H39 N5 O6

PAGE 1-A



PAGE 2-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2



35578(-33-40 RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent) (development of fluorescent dsDNA-intercalating reagents for

we velopment of fluorescent dsDL application to gene detection) RN 855781-84-9 CAPLUS CN [1.2.510m-st]

(D, 2,5)Osatiazolo(3,4-c)pyritine-6-carboxylic acid, 4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

L29 ANSWER 24 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2006:503242 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER:

AUTHOR(S):

2006:50232 CMPUOS Pcll-text
146:76997
The effect of 4,7-diphenyl-1,2,5-oxadiazolo(3,4-c)pyridine-6-carboxylic acid on protein tyrosize phosphatas-el activity
Balasu, Mihaela Camelia; Costea, Ion; Popeacu, Angela Pepartenet of Oxoganic Chemistry, "Politehnica"
University, Bucharest, 60902, Bon.
Revue Roumaire de Chimie (2006), Volume Date 2005, 50(9-10), 851-654
CUMDN: RREMAX; ISSN: 0035-3300
Bittura Academic Momane

PUBLISHER: DOCUMENT TYPE: Editura Academiei Romane LANGUAGE: English

- DRIGHG: Deglish
 Protein tyroxine phosphatares (PTP) are regulatory proteins that play an important role in cell signaling processes. They exert their regulatory action in conjunction with protein tyroxine kinases keeping under strict control the phosphorylation level of specific signaling proteins. PTPSS (PTP SIEP) IN PROSECTION (PTPSS) and REGION (PTPSS) are reported by the restrated luter attribution to the PTPSS (PTPSS) and REGION (PTPSS) are reported by the results of our study concerning the inhibitory effect of 4, 1-diphenyl-1,2,5-condiazolo(3,4-d)pyridine-6-curboxylic scid (IOCRA) on PTP-SI scivity. To this purpose three PTP-SI corns were expressed and purified (Losing p-sitophenylphosphate (SIPP) as substrate, the PTP-SI forms displayed decreased activities to increased concerns. Of DOCA in the rapper SCIPP cancer SCIPP considerates the representations of DOCA in the rapper SCIPP cancer SCIPP cancer science and recreased concerns. increased concns. of DOPCA in the range 5-200 µM.
- (2012-24)

 (EDS) (Biological study, unclassified), BIOL (Biological study)

 (DORA); effect of 4,7-di-Ph-1,2,5-coadiazolo[3,4-c]pyridine-6carboxylic acid on protein tyrosine phosphatase-al activity)

 SIJ13-8-0 (CMROS)

 (1,2,5)Cadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl(CA) (CMROS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 25 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:442382 CAPLUS Fall-text DOCUMENT NUMBER: 146:252137

TITLE:

Organic electroluminescence using polymer networks

from smectic liquid crystals Aldred, Matthew; Carrasco-Orozco, Miguel; Contoret, AUTHOR(S): Aldred, Matthew, Carrasco-Guozo, Mignel, Controck, Adda; Dong, Dewen, Farrar, Kinon; Kelly, Stephen; Kirney, Stuart; Mathieson, Denn; O'Weill, Mary; Tsoi, W. Chung; Vlachoz, Panos Department of Chemistry, University of Bull, Hull, HD6 78K, UR
Liquid Crystals (2006, 33(4), 459-467
COURS: LUCRSS; ISSN: 0267-8292
Taylor & Francis Ltd.

CORPORATE SOURCE:

SOURCE:

Journal English

LANGUAGE: English English synthesis of a red light-emitting and photopolymerizable smectic liquid crystal (reactive mesogen) is reported. The suitability of polymer networks formed from smectic reactive mesogens for use in organic light-emitting diodes COMED) was investigated. The use of nixts of smeetic reactive mesogens was shown to lower processing temperature for CAED fabrication to room temperature. The efficient energy transfer from a nematic polymer network host to a smeetic light-emitting depart, and polarized emission from a polymer network formed from an aligned smeetic reactive mesogen were observed.

RE: PRP (Properties); TEM (Technical or engineered material use); USES (Uses) ----(polymer networks from snectic liquid crystals for organic

(Douglast Network Date Accessed and September 1997) (1997)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

REFERENCE COUNT:

6 CHINES (6 CHINES)

44 THERE ARE 44 CHED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 26 0F 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:269311 CAPLUS Full-text DOCUMENT NUMBER: 144:325826

Development of double stranded DNA intercalating organic electroluminescence probe for gene detection

assay Isobe, Shimichiro INVENTOR(S): Japan PCT Int. Appl., 52 pp. PATENT ASSIGNEE(S):

SOURCE: CODEN: PIXXD2 Patent DOCUMENT TYPE:

LANGUAGE:
FAMILY ACC. NUM. COUNT: :
PATENT INFORMATION:

| PATENT | AIENI NO. | | | | | KIND DATE | | | APPL | ICAT | ION | NO. | | Di | ATE | |
|---------|--------------|-----|-----|-------------|-----|-----------|------|------|------|------|-----|---------|-----|-----|-----|---|
| | | | | | | | | | | | | - | | | | |
| WO 2004 | O 2006030788 | | | A1 20060323 | | | WO 2 | 005- | JP16 | 847 | | 2005091 | | | | |
| W: | ΑE, | AG, | AL, | AM, | AT, | AU, | λ2, | Βħ, | BB, | BG, | BR, | В₩, | BY, | BΣ, | CA, | C |
| | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | BB, | EG, | ES, | FI, | GB, | G |
| | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | M, | KP, | KR, | K |
| | LC, | LK, | LR, | LS, | LT, | W, | LV, | MA, | MD, | MG, | MK, | MN, | М, | MX, | MΣ, | N |
| | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | S |
| | SL, | SM, | SY, | IJ, | ΙM, | IN, | TR, | II, | 12, | Οħ, | UG, | US, | UΣ, | VC, | W, | Y |
| | ٤A, | ZM, | 2M | | | | | | | | | | | | | |
| RW | ΑI, | BE, | BG, | CH, | CY, | CΣ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | Ι |
| | IS. | II. | LT. | LO. | LV. | MC. | NL. | PL. | PT. | RO. | SB. | SI. | SK. | TR. | BF. | В |

15, IT, IT, LU, DV, NC, NL, PE, PT, RO, SS, SI, SK, TR, RP, RJ, CF, CG, CT, CM, GA, GM, GG, GW, ML, MR, NS, SM, TD, TG, SM, GB, GM, RE, IS, NM, MR, NR, SN, SI, SI, TZ, UG, EM, ZM, AM, AM, AM, SK, RG, KM, ND, SM, TJ, TM

PRIORITY APPAN. INFO: JP 2004-261061 A 20040914

AB Double stranded DNA-intercalating organic electroluminescence probes for gene detection assay have been developed. The seven-in type DNA-intercalating probe is consisted of organic electroluminescence pigment. NDA inteling moisty and the linker region. The organic electroluminescence pigments are five-membered

state. IT 980130-74-19 280124-15-8P 980134-76-9P 880134-76-19

SMILLAYM.10 PRIMARY TRANSPORT OF THE PROPERTY OF THE PROPERTY

CM 1

CRN 880134-73-6 CMF C54 H61 N7 014

PAGE 1-A

__ (CH2)3_O_CH2_CH2_O_CH2_CH2_CH2_O_(CH2)3_NI

CM 2

CPN 76-05-1 CMF C2 H F3 O2

RN 880134-75-8 CAPLUS
CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxanide, $\label{eq:local_constraints} N_i = \{1, 3, 6, 8 - \text{tetrahydro-1}, 2, 6, 8 - \text{tetraxoxbenso} [\text{lm}] [3, 8] \text{ phenanthroline-2}, 7 - \text{dily1} \text{ is } (3), 1 - \text{propanediyl} \text{ oxy-2}, 1 - \text{thanediyl} \text{ oxy-2}, 1 - \text{thanediyl} \text{ oxy-3}, 1 - \text{propanediyl}) \text{ is } (4, 7 - \text{bis } (4 - \text{nethoxypbenyl}) - \text{ (CA INNEX NAME)}$

PAGE 1-A

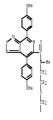
PAGE 1-C

PAGE 1-B

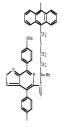


880134-76-9 CAPLUS [12,5] Dandisolo[3,4-c] pyridine-6-carboxanide, M.N. [-5,1] nathacaceasiyilnis(asthyleneoxy-2,1-ethanediyl]) bis[4,7-bis(4-methoxyphenyl)-H-methyl- (9CT) (CA INDER NAMS)

PAGE 1-A



PAGE 2-A



880134-78-1 CAPLUS
[1,2,5]Oxadi acolo[3,4-c]pyridine-6-carboxanide,
4,7-his(4-methoxyphenyl)-N-methyl-N-[2-[[10-[[2(methylamino]ethoxy]methyl]-9-anthracenyl]methoxy]ethyl]-,

2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 880134-77-0

CMF C42 H41 N5 06

PAGE 2-A

PAGE 1-A

CM 2

CPN 76-05-1 CMF C2 H F3 O2

II 055/81-20-50

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI

(Reactant or reagent) (development of double stranded DNA intercalating organic electroluminescence probe for gene detection assay) 855781-84-9 CAPLUS

(CA INDEX NAME)

4,7-bis(4-methoxyphenyl)-, 2,5-dioxo-l-pyrrolidinyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMET

ACCESSION MORBER:

2006:105656 CAPINE PAIL-text

ACCESSION MORBER:

1000:MORT NUMBER:

11THE:

Beterocyclic reactive mesogens: synthesis,
characterisation and sessmosphic behaviour

AUTHOR(S):

Alfred, Matthew; Valchox, Panco; Dong, Dower; Ritney,
Stuart; Chung Isol, W., O'Hell, Mary, Relly, Stephen

COMPRONES COMPOS:

Department of Chemistry, Oniversity of Bull, Bull, Bull

187, Peop. Peop. Chase

SOURCE:

Liquid Crystals (2005), 12(8), 551-65

COMMENT TIPE:

Journal

LANGOMORE:

Replant & Francis Med.

LANGOMORE:

Language:

Language:

All Novel heterocyclic and photeoplymerizable liquid crystalline materials

(reactive mesogens) with smectic phases were synthesized and characterized. A

selection of heterocyclic rings, such as benechizable, hemochimidiatole and

pyrimidine, was incorporated into the aromatic core to control the

electrochen/Junimescence properties and the structural geogenic. Particular

sephasis is focused on structure-property relations, in which the variation of

nol. structure and its subsequent effect on the liquid crystalline transition

tens. were studied. temps. were studied. 877207-75-10

phenyleneoxy)]bis-, 1,1'-bis(1-ethenyl-2-propen-1-yl) ester (CA INDEX

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS

RECORD (16 CITINGS)

55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 AMSWER 28 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2005:1026011 CAPLUS <u>Full-text</u> DOCUMENT NUMBER:

INVENTOR(S):

2005:105011 CAPUNS Full-test
143:335872
Grgnic ronlinear optical material
Mataga, Shundaro; Dhiemann, Thies; Ishii, Isutomu;
Rato, Shinichiro; Gormaro, Hideki; Shiqeiwa,
Moriyuki; Maeda, Shuichi
Mitsubishi Chemical Corp., Japan
Jon. Rokai Jokey Hobn, 28 gp.
COSHN: JRUGNEP

Delarer

SOURCE:

DOCUMENT TYPE: Patent LAMGUAGE: J. FAMILY ACC. NUM. COUNT: 1 Japanese PATENT INFORMATION:

| PAIENI NO. | KIND | DATE | APPLICATION NO. | | DATE | | |
|-----------------------|------|----------|-----------------|---|----------|--|--|
| | | | | | | | |
| JP 2005258388 | λ | 20050922 | JP 2004-239729 | | 20040819 | | |
| JP 4501588 | B2 | 20100714 | | | | | |
| RIORITY APPLN. INFO.: | | | JP 2003-404725 | A | 20031203 | | |
| | | | JP 2004-32223 | A | 20840209 | | |

OTHER SOURCE(S): MARPAT 143:335872

AB The invention relates to an organic nonlinear optical material, characterized by a large two-photon absorption cross section, and a large Stokes shift, and represented by (Ar2)m-Ar1-(Ar3)m (Ar1 - divalent heterocyclic group; Ar2 and Ar3 = beterocyclics and aromatic hydrocarbons; and m and m = 1-4 integers).

RL: PNU (Preparation, unclassified); SPN (Synthetic preparation); PREP (Preparation)

(organic nonlinear optical material) RN 865091-72-1 CAPLUS

CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis([1,1'-biphenyl]-4-yl|-, ethyl ester (CA INDEX NAME)



L29 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ARLUS COPPEIGHT 2011 ACS on STN
2005;589311 CAFLOTS Full-tent
143:93375
Method for detecting biomolecule using labeling dye or
labeling kit
Isobe, Shinichiro
Mataka, Shundaro, Japan; Takenaka, Shigeori
PCT Int. Repl., 67 pp.
COSEN: PIXXXX
PRASEN
P ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

INVENIOR(S): PATENT ASSIGNEE(S):

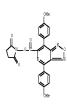
SOURCE: DOCUMENT TYPE: Patent

LANGUAGE: J FAMILY ACC. NUM. COUNT: 1 Japanese PATENT INFORMATION:

| | TENT | | | | | | | | | | | | | | | | |
|----|------|--------|-----|-----|-----|-----|------|------|-----|------|------|------|------|-----|-----|------|-----|
| | 2005 | | | | | | | | | | | | | | | | |
| | И: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | AΣ, | ΒA, | BB, | BG, | BR, | BW, | BY, | ΒŹ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | C2, | DE, | DK, | DM, | D2, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | Œſ, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KΡ, | KR, | KΣ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | Mi, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | ΡĪ, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | IJ, | TM, | TN, | TR, | II, | ΓZ, | UA, | UG, | US, | 02, | VC, | W, | YU, | žħ, | ZM, | 2W |
| | RW: | B₩, | GH, | GM, | KE, | LS, | М, | MΣ, | NA, | SD, | SL, | S2, | T2, | UG, | ZM, | ΣW, | AM, |
| | | AΣ, | BY, | KG, | K2, | MD, | RU, | IJ, | TN, | AI, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IS, | II, | LT, | LU, | MC, | NL, | PL, | PT, |
| | | RO, | SE, | SI, | SK, | IR, | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GΝ, | GQ, | G₩, | ML, |
| | | MR, | NE, | SN, | TD, | ΤG | | | | | | | | | | | |
| JP | 2005 | 2080 | 26 | | Α | | 2005 | 0804 | | JP 2 | 004- | 1051 | 87 | | 2 | 0040 | 331 |
| JP | 3881 | 667 | | | B2 | | 2007 | 0214 | | | | | | | | | |
| US | 2005 | 0181 | 380 | | Al | | 2005 | 0818 | | US 2 | 004- | 8227 | 75 | | 2 | 0040 | 413 |
| US | 7015 | 002 | | | B2 | | 2006 | 0321 | | | | | | | | | |
| EP | 1712 | 911 | | | Al | | 2006 | 1018 | | EP 2 | 004- | 8075 | 72 | | 2 | 0041 | 222 |
| | R: | λī, | DE, | FR, | GB, | ΙT | | | | | | | | | | | |
| CN | 1902 | 490 | | | Α | | 2007 | 0124 | | CN 2 | 004- | 8003 | 8772 | | 2 | 0041 | 222 |
| IN | 2006 | CN 02. | 338 | | Α | | 2007 | 0706 | | IN 2 | 006- | CN23 | 38 | | 2 | 0060 | 626 |
| KR | 2007 | 0038 | 27 | | Α | | 2007 | 0105 | | KR 2 | 006- | 7014 | 817 | | 2 | 0060 | 721 |
| US | 2007 | 0154 | 890 | | Al | | 2007 | 0705 | | US 2 | 006- | 5840 | 89 | | 2 | 0060 | 809 |
| | | | | | | | | | | | | | | | | | |

REV. PRO-NUM-PS BL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) [method for detecting biomol. using electroluminescent labeling dye]

RN 855781-84-9 CAPUS
CN [1,2,5]Oxadianolo[3,4-c]pyridime-6-carboxylic acid,
4,7-bio(4-methoxypbenyl)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



\$55050 -2355V \$5006255-10

\$2759.2-205 \$5002-5-40 RESTRICT STATES AND ADDRESS OF THE PROPERTY OF THE PROP



857048-00-1 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid 4,7-bis(4-methoxyphenyl) -, ethyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

REPERENCE COUNT.

THORE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 20

L29 AMSMER 30 0F 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2005:589130 CAPLUS Full-text DOCUMENT NUMBER: 143:86448 Single-layer organic el device

TITLE: INVENTOR(S) Isobe, Shinichiro Mataka, Shuntaro, Japan; Takenaka, Shigeori PCT Int. Appl., 26 pp. CODEN: PIXXD2

PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent

LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION

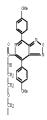
| | ENI | | | | KIN | D | DATE | | i | APPL | ICAT | ION | NO. | | D | ATE | |
|----|------|-----|-----|-----|-----|-----|------|--------------|-----|------|------|-------|-----|-----|------|-------|-----|
| | 2005 | | | | Al | - | 2005 | 0707 | 1 | 10 2 | 004- | JP19. | 211 | | 2 | 0041 | 222 |
| | W: | AΞ, | AG, | AL, | AM, | AΓ, | AU, | AΣ, | BA, | BB, | BG, | BR, | BW, | BY, | ВΣ, | CA, | CH, |
| | | CN, | СО, | CR, | CU, | CZ, | DΞ, | DK, | DM, | DΣ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GΕ, | GH, | GM, | HR, | HU, | ID, | Π_{τ} | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KΣ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MI, | MX, | MΣ, | NA, | NI, |
| | | NO, | NΣ, | OM, | PG, | PH, | PL, | ΡĪ, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | IJ, | ΙM, | TN, | IR, | TΓ, | Τž, | UA, | UG, | US, | UZ, | VC, | W, | YU, | ZA, | ΣM, | ZW |
| | RW: | BW, | GH, | GM, | ΚE, | LS, | М, | MΣ, | NA, | SD, | SL, | SZ, | 12, | UG, | 214, | ΣW, | AM, |
| | | ΑŽ, | BY, | KG, | ΚŹ, | MD, | RU, | IJ, | ΙM, | ΑĪ, | BΕ, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, | IS, | IΓ, | LT, | LU, | MC, | NL, | PL, | ΡĪ, |
| | | RO, | SE, | SI, | SK, | TR, | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | ŒĬ, | GQ, | G₩, | ML, |
| | | MR, | NE, | SN, | ID, | ΤG | | | | | | | | | | | |
| | 2551 | | | | | | | | | | | | | | | | |
| EP | 1715 | 019 | | | Al | | 2006 | 1025 | | BP 2 | 004- | 8075 | 68 | | 2 | 0041. | 222 |
| | R: | | | | | | ES, | | | | | | | | | MC, | ΡĪ, |
| | | IE, | SI, | LT, | FΙ, | R0, | CY, | TR, | BG, | CZ, | EE, | HU, | PL, | SK, | IS | | |

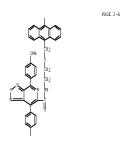
CN 1965052 20070516 CN 2004-80038650 20041222 CN 1965052 JP 4553142 B B2 20100929 20100929 JP 2005-516509 20041222 CN 101944571 KR 2006133541 20110112 CN 2010-10249740 KR 2006-7012800 20041222 20061226 20060626

The 2006-13341 A 2006-126 RR 2006-021800 2006-056 BP 2006-03341 A 2006-126 RR 2006-021800 2006-056 BP 2007-01981 A 2007-052 BP 2007-021800 2006-061 PM 2007-01981 A 2007-052 BP 2007-0275 A 2001-227 BP 2001-228 ASSIGNMENT RESIDER FOR US PATRIA WAILARKS IN LOSS DISPLAY FORMAT AB Disclosed is an organic EL dye enabling to provide an organic EL device which is capable of emitting a light at a low voltage even when it has a single-layer Structure. Also disclosed is an organic EL device which is capable of emitting a light at a low voltage even when it has a single-layer Structure. Also disclosed is an organic EL device which is capable of emitting alpha at allow voltage even when it has a single-layer Structure. Also disclosed is an organic EL device which is device with the structure of the structur

RE: EW: (Tevice component use): SPM (Synthetic preparation); PREP (Preparation); USSS (Uses) (single-layer organic el derice) (SSSPE 48-0 (AMUS) [11,2,5] Okadia solo[3,4-c] printine-6-carboxanide, NAV-[9,1] okadia solo[3,4-c] printine-6-carboxanide, NAV-[9,1] okadia solo[3,4-c] (A DEEX NAVE) (SASSE) (

PAGE 1-A



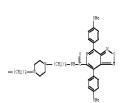


PAGE 3-A

l,

855781-87-2 CAPLOS [1,2,5]Oxadiaxolo[3,4-c]pyridine-6-carboxamide, N,N'-[1,3,6]E-tetrabpirco-1,3,6,8-tetrabpirco-1,2,6]Oxadiaxolo[1,3,6]Pensanthroline-2,7-diy]hiss[1-propasediy]-4,1-piperazisediy1-3,1-propasediy1]bis[4,7-his(4-methoxypheny1)-(9CT) (CR NDEK NAME)

PAGE 1-A



PAGE 1-B

IΓ

RL: RCI (Reactant); RACI (Reactant or reagent)

ns: N.1 (Reactant; NAL1 (Reactant or reagent)
(single-layer organic el device)
855781-83-8 CAPUUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-his(4-methoxyphenyl)- (CA INDEX NAME)



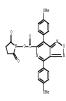
CN

235781-89-9P RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent)

(single-layer organic el device) 855781-84-9 CAPLUS

633761-64-7 CAPBUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,

4,7-bis(4-methoxypheny1)-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)



23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 31 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2004:883110 CAPLUS <u>Fuil-text</u>

DOCUMENT NUMBER: 142:280019

142:280019
Synthesis and biological application of a new
1,2,5-oxadiazolo13,4-clypyridine moiety fluorescent
marker
Balasu, Mihaela C.; Costea, Ion; Fratila, Faluca;
Pepescu, Angela; Draghici, Constantin; Szedlaczek,
Stefa n. S. Constantin; Constantin; Constantin;
Declarate & Constantin; Constantin; Constantin;

Steran B.

Department of Organic Chemistry, "Politehnica"
University, Bucharest, 060042, Rom.

Revue Roumaine de Chimie (2004), 49(3-4), 309-315

COMEN: RRCHAN; ISSN: 0035-3930 CORPORATE SOURCE:

SOURCE:

PUBLISHER: Editura Academiei Romane

DOCUMENT TYPE: Journal LANGUAGE: English OTHER SOURCE(S): CASREACT 142:280019

SOMERICS: CASEBER 142:28019
The synthesis of succinimity! exter of 4,7-diphenyl-1,2,5-ommainsolo(3,4-c)pyridine-6-canboxylic said (GOR) led to a new, Thorescent, amine-specifir reagest, in a good yield. The efficiency of DOR-ester in protein labeling was evidenced using boxine serus albumin (SAM) as a protein trayer. The labeled SSA thus obtained is optimally excited within the near OV bandwidth, yields a bright preen-yellow fluorescence and possesses an unusually large Scokes shift. These characteristics qualify the DOR-ester for various applications which involve fluorescent labeling of proteins-including fluorescence many transfer (SMR) certs.

Fluorescence energy transfer (FRET) expts. \$2731-38-30, bioconjugate with BSA RU: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(synthesis and evaluation of a new 1, 2,5-oxadiazolo[3,4-c]pyridine

bioconjugate fluorescent marker) 85731-38-0 CAPLUS

(CA NOME) (A.7-diphenyl- (CA NOME) (RACE) (RACE) (RACE) (RACE) (RACE) (RACE) (RACE)



NATION-1-46
RU: BSU (Biological study, unclassified), PSP (Properties), RCI (Reactan), SRN (Synthetic preparation); BGC (Biological study); PSPSP (Perparation), PSC (Reactand) - reagent) (synthesis and evaluation of a new 1,2,5-oxadiasolo(3,4-c)pyridine

bioconjugate fluorescent marker) 847203-15-0 CAPLUS

(1,2,5)Oxadiazolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, 2,5-dioxo-1-pyrrolidinyl ester (CA INOEX NAME)



RL: RCI (Reactant): RACI (Reactant or reagent)

(synthesis and evaluation of a new 1,2,5-oxadiazolo[3,4-c]pyridine bioconjugate fluorescent marker) 85731-38-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl- (CA INDEX NOME)



827/50-2-36 RE: ECI (Beactant); SRM (Synthetic preparation); PREP (Preparation); PRCI (Beactant or respect) (synthesis and evaluation of a new 1, 2,5-exadiazolo[3,4-c]pyridine hisconjogate fluorescent marker) 827/03-13-2 (SMR2013-13-C) (1,2.5) Pandiazolo[3,4-c]pyridine-6-carbonyl chloride, 4,1-diphenyl- (Charmery waves.

INDEX NAME

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)
THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 11

L29 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2004:204620 CAPLUS Full-text DOCUMENT NUMBER: 141:424128 Product class 7: 1,2,5-oxadiazoles TITLE:

HILE: Product class 7: 1,1,5-onadiasoles
MATHOR(5): Paton, R. M.
COBPORATE SOURCE: Department of Chemistry, University of Edinburgh, Edinburgh, EB 3JJ, UK
SOURCE: Science of Synthesis (2004; 13, 185-218
COURN: SOURCE)
FORGISHER: Georg These Verlag
DOCHMEN TUPE: Journal; General Review
LANGIAGE: English
B A review. Methods for preparing 1,2,5-onadiasoles are reviewed including contination, right transformation, and quality incent modification.

cyclization, ring transformation, and substituent modification. 225785-39-09 ΙΓ

RL: SPN (Synthetic preparation): PREP (Preparation)

(preparation of oxadiazoles via cyclization, ring transformation, and substituent modification) substituent mountivation,

RM 225795-70-0 CAPRUO

CN [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-chloropbenyl)-, ethyl ester (CA INDEX NAME)

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REP COUNT: 2

REFERENCE COUNT:

THERE ARE 22S CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE F 225

FORMAT

L29 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 2004:80973 CAPLUS Full-cext DOCUMENT NUMBER:

140:139446

140:13946
Larget characterization method for drug discovery
Ofer, Dror
Reddem Bio-Science Ltd., Israel
PCT Int. Appl., 188 pp.
COMBEN PIKEO
Patent
Person in a

ENTOR (S)

PATENT ASSIGNEE(S):

English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

TITLE:

MX 2005-1038 IN 2005-CN254 IN 2005CN00254 20070601 20050224 IN 219289 IN 2007CN01078 Al 20080606 IN 2007-CN1078 20070314 20091016 JP 2011107169 20110602 JP 2011-52633 20110310 PRIORITY APPLN. INFO.: JP 2004-522657 A3 20020724 WO 2002-IL614 US 2005-523131 A 20050121

ASSIGNMENT HISTORY FOR US PAYENT AVAILABLE BY LISUS DISPLAY FORMAT

AS Target characterization method is claimed, in which a plurality of small,
measurement mole, interact with a target and the target is characterized based
on an anal. of the interactions of the neasurement mole, with the target.
None of the measurement mole, is used as a lead or as a fragment of a lead,
nor are the mole, selected for interaction based on their unry-type diversity.
Bather, the measurement mole, are selected based on their expected shilly to
measure various chemical and/or phys. dimensions of the target. While the
number of measurement mole, is relatively small (e.g., v006), this number
spans the gase of characterization of the target mol. and can suffice to
provide a relatively complete characterization of the target. In other provide a relatively complete characterization of the target. In other embodiments, only a partial characterization is needed and/or obtained.

Alternatively or admil, while the measurement nois, are selected for span reasons, they are also used as leads or as fragments of a lead. In an exemplary embodiment of the invention, a complete process of drug discovery comprises: (a) selecting a target; (b) optionally selecting a set of measurement nois. useful for the target, or using a universal library; (c) characterizing the target using the set of measurement nois.; (d) reconstructing a phramaceutical model of the target, based on the characterization; and (e) using the model to forward a discovery process, for example, select, reject, filter and/or design a drug lead. Specifically claimed are the target based method, methods of selecting scaffolds and gauge mois. for a screening library, screening libraries, a method of obtaining information about the binding behavior of a target moil, and a method of constructing a lead compound Alternatively or addnl., while the measurement nols. are selected for span

2526-56-1 RL: PRC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(HIV-1 protease inhibitor; target characterization method for drug

discovery) 3586-66-1 CAPLUS

Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4

RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 34 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER

ARUS COPPRIGHT 2011 ACS on STN
2004:52900 CAPUDS Yull-text
140:101794
Long-life organic electroluminescent devices and
(oxidized) isobemonthiophene derivatives therefor
Suda, Yasumasa; Onikubo, Shunichi
Toyo Ink Mfg. Co., 184., Japan
Jgn. Rokal Rokey Soho, 37 pp.
COESH. JULUAF
Dates INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

Patent LANGUAGE: Je FAMILY ACC. NUM. COUNT: 1 Japanese PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| | | | | |
| JP 2004018665 | A | 20040122 | JP 2002-175186 | 20020617 |
| PRIORITY APPLN. INFO.: | | | JP 2002-175186 | 20020617 |
| OTHER SOURCE(S): | MARPAT | 140:101794 | | |
| | | | | |



- $\label{eq:BB_section} \text{AB} \qquad \text{The derivs. are I (K = S, SO, SO2; R1-R6 = H, alkyl(oxy or -thio), aryl(oxy or -thio))}$ -thio], heterocycle, cyano, maino]. Organic electroluminescent devices including I in emission layers and/or hole- or electron-injecting layers and showing high luminescent intensity and long life, are also claimed.
- 3586-65-19 RL: INF (Industrial manufacture); RCI (Reactant); PREP (Preparation); RACI

RE: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); PRCT (Reactant or reagent) [Llong-life and high-luminance organic electroluminascent devices containing (oxidisted) isobenochisphene deriva.)

356-66-1 CARCES
Loobenochuran, 1,3,4,7-tetraphengl- (CA INDEX MAME)



L29 ANSWER 35 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER:

DOCUMENT NUMBER:

INVENTOR(S):

AFUIS COPETIGHT 2011 ACS on SIN
2001:53897 CAUSE Fall-teat
138:150197

Organic electroluminescent device
Mataya, Smartaro; Thiemann, Thies; Soeda, Yasuhiko;
Kaneko, Shinichiro; Yatumani, Ayuichi; Fomatou,
Takahiro; Sakagani, Meguni
Matanakita Electric Industrial Co., Ltd., Japan
Jpn. Rokai TOKAPP Koho, 20 pp.
COCRE: NORMAN

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

APPLICATION NO. PATENT NO KIND DATE DATE A 20030509 JP 2001-327275 JP 2003133072 20011025 MARPAT 138:360197

AB The invention relates to a blue or white light-emitting organic electroluminescent device, suited for use in making a display device and a back light, comprising an organic electroluminescent layer containing a compound represented by I or IT [A and B = aromatic hydrocation group; C and D = aromatic hydrocation and beterocyclic groups; and Y = carbon atom that may have a substituent).

53,9122-54-69 RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent)

(in preparation of blue or white-emitting; organic electroluminescent



L29 AMSWER 36 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2002:759899 CAPLUS Full-bext DOCUMENT NUMBER: 138:144637

Organic light emitting diodes using an TITLE:

aryl-substituted isobenzofuran as electron transport material

AUTHOR(S):

material Maindroo, T.; Dodelet, J. P.; Lm, J.; Hill, A. R.; Bay, A. S.; D'Iorio, M. Bay, A. S.; D'Iorio, M. DNES Renegie e-Materiaux, Varennes, CC, JUE 192, Can. Synthetic Metals (2002), 130(3), 241-255 COSEN: STREET, ISSN: 0319-6179 Elsevier Science B.V. CORPORATE SOURCE:

SOURCE:

PUBLISHER.

FORLINENT: Journal
Journal
Journal
LANGUAGE
LANGUAGE
AB SLSS), a functionalized derivative of isobennofuren is highly fluorescent in
solution in toluene but also in the solid state, where its emission peaks at

500 nm. BISSS is able to transport electrons and holes but is, however, a better electron transport (SII than a hole transport material. It is possible to use BISSS, wacum sublined or spin-coated from a solid solution in a host polymer, as an EI layer with a lst spin-coated hole transport layer. The performance of these devices is improved when a hole-blocking layer is added between BISS and the cathode. In that case, a maximum luminance of 1100 cd/n2 was obtained at 400 mA/cm2.

108(3-3)-3P RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses) (organic light emitting diodes using an aryl-substituted isobenzofuran as

electron transport material) RN 16619-87-7 CAPLUS

Isobenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: S THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 37 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2002:273079 CAPLUS <u>Full-text</u> 136:301556

DOCUMENT NUMBER:

High-luminance and -efficiency organic electroluminescent devices and hydrocarbon compounds

INVENTOR (S):

electroluminescent devices and hydrocarbon con therefor Ishida, Isutomu; Shimamura, Takehiko; Totani, Yoshiyuki; Makatsuka, Masakatsu Mitsui Chemicals Inc., Japan Jpn. Kokai Toktyo Koho, S8 pp. COESN: JUXYAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 2002110353 | A | 20020412 | JP 2000-294002 | 20000927 |
| JP 4330058 | B2 | 20090909 | | |
| PRIORITY APPLN. INFO.: | | | JP 2000-294002 | 20000927 |
| | | | | |

OFFICE ACTION OF ACTIO

3586-59-1, 1,3,4,7-detraphenylisobenzofuran 1594.5-59-2 52422-91-7 (5769x-52-2 407864-55-2 497694-69-2

RE: RCI (Reactant); RACI (Reactant or reagent)
(in preparation of bisbenzoindenobenzodifluoranthene derivs, for organic

electroluminescent devices)

3586-66-1 CAPLUS

Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



- 16619-87-7 CAPLUS
 Isobenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



- 62422-91-3 CARLUS
- Isobenzofuran, 1,3-bis(4-methylphenyl)-4,7-diphenyl- (CA INDEX NAME)



- 407604-53-9 CAPLUS Isobenzofuran, 4,7-diphenyl- (CA INDEX NAME)



- 407604-55-1 CAPLUS
 Isobenzofuran, 4,7-bis[4-(1,1-dimethylethyl|phenyl]- (CA INDEX NAME)



- Isobenzofuran, 1,3-dimethyl-4,5,6,7-tetraphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

129 ANSMER 34 0F 81 CAPLUS COPYRIGHT 2011 ANS on STN
ACCESSION NUMBER:
105:28012 154:28015 CAPLUS Full-bext
105:28015 154:

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 39 pp. SOURCE: CODEN: JKKKAF

DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

KIND DATE MARPAT 136:286307 OTHER SOURCE(S):



- AB The invention relates to an organic electroluminescent device comprising a general formula I [R1-12 = B, halo, or (um) substituted organic residue groups selected from alkyl, aryl, alkowy, arylowy, alkylthio, arylthio, amino and heterocyclyl; adjacent substituents of R1-12 may form a ring; ≥ 7 R1-12 are (un)substituted aryl; R1-4 can not be H simultaneously].
- RL: RCT (Reactant): RACT (Reactant or reament)
- No. No. 1 (Mexicant; No.) (Mexicant or respent)
 (applichaged derive, organic electroluminescent devices and materials
 using them]

 RM 358-6-6-1 (ARMIS
 CN Isobenofuran, 1,3,4,7-tetraphenyl- (CR INDEX NOME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L29 ANSWER 39 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 2002:70704 CAPLUS Full-text 136:355194 Preparation of

Preparation of 4,7-dihetaryl-1,2,5-oxadiazolo[3,4-c]pyridines as red fluorescent materials Gorohmaru, Hideki; Thiemann, Thies; Sawada, Tsuyoshi; AUTHOR(S):

Gorobarcu, Hiddi; Thiemann, Thies; Savada, Israyashi Takhashi, Kandirii Nadi-i, Katami; Osh, Naoto; Kosuqi, Yoshio; Mataka, Shuntaro Graduata School of Engineering Sciences, Kyushn Dubrersity, Kasaya, 180-6580, Japan Beterocycles (2002), 56(1-2), 421-431 COGER: HCCUMP, 1859: 0085-541 Jupan Institute of Neterocyclic Chemistry Journal English CASPENCT 136:135194 CORPORATE SOURCE: SOURCE:

DUBLISHER -

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):



1,2,5-0madiazolo[3,4-c]eyridines (I; $\hbar r$ = some or all of 2-thienyl, 2-furanyl, 3-thienyl, 3-baso|[b]thienyl, 5-mathyl-2-thienyl, 5-broom-2-thienyl, 2,5-dinethyl-1-thienyl; $\Re = \text{cynn}$ (6), COZR (7), Ph (8), cil (10)) were prepared, in quest of a red fluorescent material useful in ORE0 devices. These compds. in quest of a red fluorescent material useful in OREO devices. These compdis-cent fluorescence of orange to red color in solution and in the solid state. 6-Cyano derivs. (6) show a higher quartum yield than the corresponding esters (7), the Ph derivative (8), and the unsubstituted compound (10). Red Elight at \(\lambda_{\text{init}}\) 6-80 im was obtained in an OREO device when St 4,7-bis(5-phenylthien-2-p1-1.2,5-coadisaclo(3,4-c)pyridine-6-carboxylate was used as a dopart emitter. The crystal and nol. structures of 4,7-bis(2-thieryl-6-cyano-1,2,5-coadisaclo(3,4-c)pyridine were determined by x-ray controlled.

crystallog.
06582-55-0, Bthyl 4,7-diphenyl-1,2,5-oxadiazolo[3,4-c]pyridine-6-II

| Non-y-y-y-stry1 4, -mapsay-1,2,-coananaon(),4-c|pyrinire-corboxylate | %95/5-7;2,
6-Cyano-4,7-diphenyl-1,2,5-coandiarolo(3,4-c|pyridine RE: PRP (Properties) (comparison; heteroaryl-substituted oxadiazolopyridines as red fluorescent substances)

riuorescent substances|
16593-55-0 CAPUIS
[1,3,5]Oxadiasolo(3,4-c)pyridine-6-carboxylic acid, 4,7-diphenyl-, ethylester (CA INEX NAME)



76593-57-2 CAPUUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-dipbenyl- (CA INDEX



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (11 CITINGS)
22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS BEFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 40 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2000:25605 CAPLUS Full-text. DOCUMENT NUMBER: 132:72373

Preparation of benzo[k] fluoranthene derivatives TITLE: materials for organic electronic devices Nakatsuka, Masakatsu; Kitamoto, Noriko Mitsui Chemicals Inc., Japan INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp. CODEN: JKKKAF

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|---------|----------------------|-----------------|----------|
| | | | | |
| JP 2000007594
JP 4041582 | A
B2 | 20000111
20080130 | JP 1998-169991 | 19980617 |
| PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
GI | MARPAT | 132:72373 | JP 1998-169991 | 19980617 |





The title compos. [I; Ar1, Ar2 = (un) substituted aryl; XI - X4 = B, halo, linear, branched, or cyclic alkyl or alkowy, (un) substituted aryl] and [II; F1, R2 = linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, or cyclic alkyl; XII, XI4 = B, halo, linear, branched, branche

II NSSE-N-1, 1,3,4,7-Tetraphenylisobenosfuran
RE: RCI [Reactant]: RACI [Reactant or reagent]
(preparation of benos[x]fluorantheme derive. materials for organic
electronic
electronic
RM 1368-65-1 CAPLUS
CN Isobenosfuran, 1,3,4,7-tetraphenyl- (CN INDEX NAME)



L29 ANSWER 41 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN

DOCUMENT NUMBER:

FRUS COPYFIGHT 2011 MCS on STN
1999:221402 CAPRIOS Yull-best
131:6553
10-Bytrosy-Tarplindero[1,2-b]-1,2,5-oxadiazolo[3,4-d)pyridines and
7-aryl-10-oxoindeno[1,2-b]-1,2,5-oxadiazolo[3,4-d)pyridines - synthesis, spectra, and polymorphism
Mataka, Shuntaro, Gorobnare, Micheit; Indemann, Thies;
Sawada, Tayuyohi; Takahashi, Wardfuni; Tori-i,
Alvinoshi

Akivoshi

Institute of Advanced Material Study, Graduate School CORPORATE SOURCE:

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

NORMIE SCURCE: Institute of Advanced Material Study, Gesdmate Cabol of Engisering Sciences, Kymahn University, Kasupa, 816-8581, Japan 16-8581, Japan 18-8581, Japan 18-858 polymorphic forms in the solid state, of which two are yellow and two are red. One of them are interconvertible (yellow/res) upon exposure to different solvents. K-ray crystal structure smal. of one of the red forms shows the Phring and the indemocsationologyticine ring to be coplanar.

15.752-75-79. A "Paisit-pechiotophenyl-6-(tethoxyrestropyl-1,2,5-coadisaolo],4-clpyridine 215755-71-79.

Ris Ext [Reactant] FSR (Synthetic preparation); PREP (Preparation); PROT (Reactant or reagent)

(intermediate; preparation, fluorescence and crystal polymorphism of indemocsacial sologyticine dyes)

[1,2,5] Smadisaolo[3,4-c] pryridine-6-carboxylic scid,
4,-bais(4-chotophenyl)-, ethyl ester (Ch. DUGEN MME)

4,7-bis(4-chlorophenyl)-, ethyl ester (CA INDEX NAME)



225795-71-1 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-bis(4-methylphenyl)-, ethyl ester (CA INDEX NAME)

08582-55-0, 4,7-Diphenyl-6-(ethoxycarbonyl)-1,2,5-oxadiazolo[3,4c]pyridine

RL: RCI (Reactant); RACI (Reactant or reagent) (starting material; preparation, fluorescence and crystal polymorphism of indenooxadiazolopyridine dyes)

76593-55-0 CAPIUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl

ester (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 42 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER

DOCUMENT NUMBER:

UNION COMPAGENT 2011 ACS on STN
1999:112544 CAPROS Full-teat
130:33265
Synthesis of 9-deoxycotylenol derivatives carrying a
fluorescent chromophore
Li, Feng Rato, Nobno; Gorohmaru, Rideki; Mataka,
Shuntaro; Mora; Akira; fakeshita, Ridoshi
Tohwa Institute for Orient Studies, Tohwa University,
Jane CORPORATE SOURCE:

Kyushu Daigaku Kino Busshitsu Kagaku Kenkyusho Hokoku

SOURCE: (1998), 12(2), 125-130 CODEN: KDBHFS; ISSN: 0914-3793

PUBLISHER: Kyushu Daigaku Kino Busshitsu Kagaku Kenkyusho DOCUMENT TYPE:

LANGUAGE:



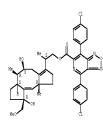
86 The structure-activity relationships of cotylenol, a plast-growth regulating diterpenoid, 9-deoxycotylenol was found to retain the biol. activities. The synthesis of 9-deoxycotylenol derive. cerrying a fluorescent chromophore from I were achieved to create new tools for targeting 14-3 proteins which are the binding proteins of this class of nois, and recently were regurded to be the key regulatory proteins in the intracellular signal transductions.

IT 22485-66-87 224838-67-59 224835-72-35

RB: MGR (Agricultural use); BMC (Biological activity or effector, except

RE: NER (Agricultural use); BMC (Biological activity or effector, except adverse); BMC (Biological study, unclassified; SMC (Synthetic preparation); BMC (Biological study), PPEP (Preparation); USES (Uses) (preparation of fluorescent chromoptore derivs. of 9-deoxyoctylenol) 24430-664 (CMPUS)
[1,2,5) (Boaddiasolo(3,4-c)pyridine-6-carboxylic acid, 4,7-bis(4-chlorophenyl)-, (25)-2-(15,5,6%,6s,5,9%,10MP)-1,2,4,5,6,6,1,7,8,7,10a-deoxhydro-5,7-dihydrony-5-(methoxymethyl-6,10a-disethyldicyclopente(a,d)cycloocten-3-yl)propyl ester (CA INDEX (DME)

Absolute stereochemistry.

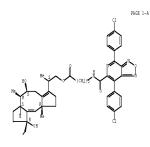


RN 224430-67-5 CAPLUS CN [1.2,510xadia=n¹-f²

Leadure-13 Cornel (1,5)Stockais-16(1,4)elpyridine-6-carboxylic scid, 4,7-dipbenyl-, (126)-2-[155,66,665,98,1087-1,2,4,5,6,66,7,8,9,10s-decahydro-5,9-dihydroxy-9-(methoxyne-17)-6,10s-dimethyldicyclopenta[s,d]cycloocten-3-yl]propyl ester (CA INGEX HOME)

RN 224430-72-2 CAPLUS

Absolute stereochemistry



PAGE 2-A

IT 85731-38-0 224839-73-3

RL: RCI (Reactant): RACI (Reactant or reagent)

(preparation of fluorescent chromophore derivs. of 9-deoxycotylenol) 85731-38-0 CAPLUS

[1, 2, 5] Oxadiazolo(3, 4-c)pyridine-6-carboxylic acid, 4, 7-diphenyl- (CA

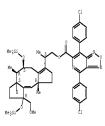


224430-73-3 CAPLUS
[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid,
4,7-bis(4-chlorophenyl)- (CA INDEX NAME)

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent)
(preparation of fluorescent chromophore derivs. of 9-deoxycotylenol)

(preparation of Ilouroscent chromophore derive, of 9-decaycotylenol) 22440-65-3 (AVI-4-c)pyridine-6-carboxylic scid, 4, -his(4-chlorephyll-, (25)-2-(155,65,6s,78,108)-1,2,4,5,6s,7,8,9,108-decatypte-9-(pethoxymethyll-5,10a-dimethyl-5,9-his((ttimethylsilyl)osy)dicyclopenta[s,d]cycloocte-3-yl[propyl ester (CA DUGEN NOME]

Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT BEFERENCE COINT.

L29 ANSWER 43 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1997:544032 CAPLUS <u>fuil-text</u>
DOCUMENT NUMBER: 127:220413
GRIGINAL REFERENCE NO.: 127:42953a, 42956a

An extraordinarily twisted polycyclic aromatic

bydrocarbon
Qiao, Kiaoxin; Bo, Douglas M.; Pascal, Robert A., Jr.
Department Chemistry, Princeton University, Princeton,
NJ, 08544, USA
Angewander Chemie, International Edition in English
(1997), 26(13/14), 1531-1532
COURS: ACIEN; ISSN: 0570-0833
MULTIPYCES
Journal
Feol ish AUTHOR(S): CORPORATE SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: English CASREACT 127:220413 OTHER SOURCE(S):



AB The preparation and crystal structure of the octaphenyldibenzonaphthacene I

were reported. IT

OM. 57.6...)

RE: RCT (Reactant); RACT (Reactant or reagent)

[preparation and properties of twisted polycyclic aromatic hydrocarbon)
16619-87-7 CAPLUS

Isobenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



REFERENCE COUNT:

OS.CITING REF COUNT: 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS

RECORD (33 CITINGS)

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 44 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN LCY ANSWER 40 07 01 CAPLUS COPERIORIZUIT ACS ON SIN ACCESSION NOMBER: 1996:30200 CAPLUS <u>Foll-text</u> DOCUMENT NUMBER: 124:201755 ORIGINAL REFERENCE NO.: 124:37297a,37300a

124:3727a,37300a
Octaphenylnaphthalene and Decaphenylanthracene
Qiao, Kisoxin; Padula, Michael A.; Ho, Douglas M.;
Vogelaar, Nancy J.; Schutt, Clarence E.; Pascal,
Robert A., Jr.
Department of Chemistry, Princeton University,

CORPORATE SOURCE:

Princeton, NJ, 08544, USA SOURCE:

Journal of the American Chemical Society (1996), 118(4), 741-5

CODEN: JACSAT: ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE:

DOURNITTE: Journal
LAMNIBGE: English
OURRES SURCE(5): CASPEANT 124:201755

ABO Ottaghenylnaphthalene was synthesized by the addition of tetraphenylbenayme to tetraphenylcyclopentadienose and decaphenylanthracene was synthesized by the addition of the same aryve to hexaphenylisobenacuran followed by decoupenation of the addout. The structures of both compds. were determined by W-ray anal. Inus, outsphenylmaphthalene acceleration of approx. Ci symmetry with a slightly unculating naphthalene nucleus, but decaphenylmathracene enhibits C2 (and approx. D2) symmetry with a 63° twist of the central anthracene.

[66] 9-2.7. Annual P. REI (Reactant or reagent) (preparation and crystal and nol. structure of octaphenylanghthalene and decaphenylantnacene) (Sci-9-17. CRUES) Lancenson (Sci-9-17. CRUES)
Lobensofuran, 1,3,4,5,6,7-beamphenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 66 THERE ARE 66 CAPLUS RECORDS THAT CITE THIS RECORD (66 CITINGS)

L29 ANSWER 45 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN

| 129 MANGER 45 OF 81 CARUS COPPRIGHT 2011 ACC on SIN
| ACCSSION UNDERS: 1991-546246 CARUS Fell-best |
| 1000RBN WARRER: 1991-546246 CARUS Fell-best |
| 1151-64265, 24865a |
| 10VENTOR(5): Tashizo, Massahi; Mataga, Shunbaro, Takahashi, Fasiffun; Saito, Shopp, Tushumi, Tetuno; Adachi, Chilayar, Sato, Toshiharu; Maesa, Shuichi |
| PAIRNI ASSIGNES(5): Mitsubishi Maei Corp., Jayan |
| 50URGE: DOUBLE (FRINK) |
| 1000RBN EPRIUM |
| 1

DOCUMENT TYPE: Patent LANGUAGE: E FAMILY ACC. NUM. COUNT: 1 English PATENT INFORMATION:

> KIND DATE PATENT NO. APPLICATION NO. DATE EP 406762 A2 EP 406762 A3 EP 406762 B1 R: DE, FR, GB, NL JP 03037292 A 19910109 19911106 19940928 A2 A3 19900702 EP 1990-112589 19910218 JP 1989-172176 19910218 JP 1989-172177 JP 03037293 19890704

JP 03203982 19910905 JP 1989-343982 US 5059863 19911022 US 1990-547147 19900703 PRIORITY APPLN. INFO.: JP 1989-172176 A 19890704 JP 1989-172177 A 19890704 A 19891228 JP 1989-343982 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT



An organic electroluminescent device, comprising an organic hole-injection transport layer and an organic luminescent layer formed between 2 electrodes, is claimed in which the luminescent layer contains a compound described by the general formula I (81, 82 = an optionally substituted aromatic hydrocarthon group; R3 = 5, 0, Se, or N optionally bearing a substituent; As compound described by the general formula II (85, 86, 87, 88 = a aromatic hydrocarthon group optionally bearing a substituent; As = 5, 0, Se, or N which may have a substituent; NH = 8, amido, cyano, an ester group, altyl, carboxyl, an optionally substituted aromatic hydrocarbon group, or an optionally substituted aromatic hydrocarbon group, or an optionally substituted aromatic hydrocarbon group, or a negthylycidized derivative VSVS-S-S-L INDAC-65-4
MS: EBV (Device component use); OSSS (Uses) (electroluminescent devices containing) 8553-61-2 (DSUDS

ΙΓ

(electrolumnessen estates 6593-57-2 CRPUS (1,2,5)Cxadiazolo(3,4-c)pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX



136124-62-4 CAPLUS

CN Furo[3,4-c]pyridine-6-carbonitrile, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L29 ANSWER 46 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1988:578804 CAPLUS Foll-text DOCUMENT NUMBER: 109:178804 CAPLUS Foll-text ORIGINAL REFERENCE No.: 109:29483a,29486a

109:27483a,27480a Evidence for a radical internediate in the anodic oxidation of reduced nicotinamide adenine dinucleotides obtained by electrogenerated

chemiluminescence

cheminumsecence (Lodrik, J., Volke, J. J. Beyronsky Inst. Phys. Chem. Electrochem., Czech. Acad. Sci., Prague, 182 23, Czech. Rallytica Chimica Acta (1988), 209(1-2), 69-78 (CUGEN: ARCAM; ISSN: 0003-2670 Journal English AUTHOR(S): CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE:

AB Electrogenerated chemiluminescence is used to show that the radicals NAD* and Electrogerested cheminuminescence is used to show that the radicals NUMP and NUMPE at a Paracelaties in the electronicin, of NUMB and NUMPE at a Paracelaties in the electronicin, of NUMB and NUMPE at a Paracelain in adaptious or partly agenous (up to 15 volume%) (NUSO. As DEX mechanisms seems to predominate. The use of UMSO proved to be very convenient, with the advantage of enabling electrogenerated cheminuminescence to be obtained in partly agreement with inoinc subtrances as substrates. The method is useful in proving the existence of unstable radical intermediates. In redox processes, even for relatively large mols. such as NAUM and NAUMPH.

PRINCE (Properties)

(Unminoptor, in struct of intermediate radicals of NAUM)

(luminophor, in study of intermediate radicals of NAD) 13386-12-4 CAPLUS

Isobenzofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

L29 AMSWER 47 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1984:630276 CAPLUS Full-text

DOCUMENT NUMBER: 101:230276 ORIGINAL REFERENCE NO.: 101:34961a,34964a TITLE:

10:13450a,34964a Synthesis and reactions of 1,3-bis(rtimethylailoxy)isobensofurans Troll, T.; Schmid, K. Inst. Org. Chem., Univ. Regensburg, Regensburg, 10-8400, Fed. Rep. Ger. Tetrahedron Letters (1984), 25(28), 2981-4 CODEN: TELERY; ISSN: 0040-4039 ORPORATE SOURCE:

DOCUMENT TYPE: Journal

LANGUAGE: German CASREACT 101:230276 OTHER SOURCE(S):

AB 1,3-Bis(trimethylsiloxy) isobenzofuran was prepared from dihydrophthalic anhydride. It is not stable under the reaction conditions but was trapped with dienophiles. The tetra-Ph derivative was more stable.

RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI

RE: BIT (Beactant): SPN (Oynthetic preparation); PREP [Preparation]; 8 (Peactant or respect) (preparation and reaction of, with dienophiles) 9289-944 (DADUS Lobescoftman, 4,5,6,7-tetraphenyl-1,3-bis[(trimethylsilyl)oxy)- (CA



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD
(9 CITINGS)

L29 ANSWER 48 OF 81 CAPLUS COPYRIGHI 2011 ACS on SIN 1984:138206 CAPLUS Fill-text 100:138206 100:21074h,21075a

A convenient preparation of 1,4-dicarbonyl compounds TITLE: by ring cleavage of furans with $\operatorname{cerium}(\operatorname{IV})$ ammonium nitrate

AUTHOR(S)

Lepage, Lucette; Lepage, Yves
Lab. Chim. Org. R., UER Sci., Limoges, F-87060, Fr.
Synthesis (1983), (12), 1018-19
CODEN: SYNTER; LSSN: 0039-7881 CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): English CASREACT 100:138206

RB Furans I (R = Ph, R1 = R, COZER, PhCO; R = Me or R, R1 = B] and II (R2 = R, Ph, MeO, X = CB; R2 = R, X = CCB0; or R2 = R, Ph, X = N] were oxidatively cleaved with the (RMR12/RM03) to piw 1.4-discinced) computs. e.g., RCORI-CRICOR. Product III was condensed with (PhCOCH2/2 to give nagAthalene derivative IV.

3555-60-3.
RL: RCI (Reactant); RACI (Reactant or reagent)
(oxidative cleavage of, with cerium ammonium nitrate)

RN 3586-66-1 CAPLUS CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (10 CITINGS)

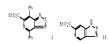
L29 ANSWER 49 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1983:198113 CAPLUS Fall-text DOCUMENT NUMBER: 98:198113

ORIGINAL REFERENCE NO.: 98:30115a,30118a

98:3UILS,3UILS Reduction of 4,7-diphenyl-1,2,5-thia(oxa) diazolo[3,4-c)pyridires affording 2,5-diphenyl-3,4-dianinopyridines and ring closure of the diamines to fluorescent sabeterocycles Mataka, Sundraco; Takahashi, Kaufuni; Inura, Tetsuro; Tashiro, Masamira, Marini, M AUTHOR(S):

Japan Journal of Heterocyclic Chemistry (1982), 19(6), 1481-8 CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal LANGUAGE: English CASREACT 98:198113 OTHER SOURCE(S):



AB Reduction of diphenyl-1, 2,5-thiadiazolopyridines, e.g., I (X = 5), and diphenyl-1, 2,5-oxadiazolopyridines, e.g., I (X = 0), gave diaminodiphenylpyridines, which were converted into fluorescent triazolo[4,5-c]cpyridines, e.g., II, selendaizolo[3,4-c]ridines, inidazolo[4,5-c]pyridines, and pyrido[5,6-c]pyridines. Reduction of 1,2,5-oxadiazolo[3,4-c]pyridines. c)pyridines gave 4,5-dihydro[1,2,5]oxadiazolo[3,4-c)pyridine.

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT RI: NU. IPROCESSIN; POR COMMUNICATION (CREATED TO THE PROPERTY OF THE PROPERTY



II 3515t-32-49 85201-38-0P

RL: SPM (Synthetic preparation); PREP (Preparation) (preparation of | RN 85731-32-4 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-methanol, 4,7-diphenyl- (CA INDEX

85731-38-0 CAPLUS

(CA NUBER NAME)



RL: RCI (Reactant); RACI (Reactant or reagent)

(reduction of) 76593-55-0 CAPLUS

[1,2,5]Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-diphenyl-, ethyl ester (CA INDEX NAME)



OS.CITING REP COUNT: 13 THERE ARE 13 CAPPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L29 ANSWER 50 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN

1981:514389 CAPLUS Full-text 95:114389 95:19177a,19180a ACCESSION NUMBER: DOCUMENT NUMBER: ORIGINAL REFERENCE NO.:

Electrogenerated chemiluminescence in mechanistic investigations of electroorganic reactions. Part III. Reduction of some disulfides at the dropping mercury TITLE:

CORPORATE SOURCE:

Reduction of some disulfides at the dropping mercury electrode
Pragat, Frita
Sett. Chem., Humboldt-Univ., Berlin, IDR-104, Ger.
Denn. Rep.
Journal of Electronnalytical Chemistry and Interfacial Electrochemistry (1981), 119(2), 315-30
CODEN: IDEBEC; ISSN: 0022-0728
Journal

DOCUMENT TYPE:

MITHOR(S) -

LANGUAGE: English

AB In the simultaneous cathodic reduction of RSSR (I; R = Ph, Bz) and fluorescent In the simultaneous cathodic reduction of SSSR (I, R = Bh, B_1) and fluorescent aromatic hydrocarbons (II) at the dropping mercury electrode in BP the existin of I is observed The electropressed chemiluminescence (ECL) originates from the electron transfer between the radical aminon (IIII) of II and BS, which are formed in a one-electron reductive cleavage of the 5-5 band by III. As an intermediate, the aminor sadical (IV) of I is assumed. In the case of I (R = I H the ECL intensity is enhanced by proton chorors (EGL), PROCERI, which increase the cleavage rate of IV (R = Bh) in an electrophilic attack by the proton. The relatively mer, threadol reduction potential of II (-1.4 to -1.6 V) for the ECL in comparison with the half-wave potential (-0.8 V) smoorates B in Exasticed between each similar mechanis of I (2 = Bb). V) supports an Hg-assisted heterogeneous reduction mechanism of I (R = Ph). The intensity-potential curves and the intensity-time curves at the Hg drop

were measured for different concns. of I (R = Ph) and II and for different Hg pressures. No luminescence was observed with I (R = o-02NC6H4, Et).133a5-12-a

RL: PRP (Properties)

(electrogenerated chemiluminescence of disulfides in presence of

mechanism of) 13386-12-4 CAPLUS

enzofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

ANSWER 51 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ### SSION NUMBER: 1981:441918 CAPLUS Full-text OMENT NUMBER: 95:41918 ACCESSION NUMBER: DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 95:7177a.7180a

Electrogenerated chemiluminescence in mechanistic Electrogenerated chemilauinescence in mechanistic investigations of electrocognic reactions. Part II. Anodic dehydrogenation of II.4-dihydrogyridines Pragat, F.; Raidorfen, B.; Volke, J.; Muthan, J. Sett. Chem., Humboldt-Univ., Berlin, DEP-104, Ger. Den. Pep.
Journal of Electromashytical Chemistry and Interfacial Electrochemistry [1981], 119(2), 301-14
COCEN. RIBER; ISSN: 0022-0728

CORPORATE SOURCE:

Journal English

AB The anodic oxidation of fifteen 1,4-dihydropyridines in MeCN was investigated by electrogenerated chemiluminescence measurements at a rotating Pt disc electrode in the presence of some luminescent compds. D. The emission electrode in the presence of some luminescent compds. D. The emission observed originates from the homogeneous electron transfer between the cation radicals of D and the free pyridiniumyl radicals formed in the dihydropyridine oxidation It follows from the luminescence-potential curves that, in addition to the pyridiniumyl radicals, the dihydropyridine cation radicals are also involved in the dehydroperstion process. Therefore, from the different oxidation pathways of dihydropyridines described in the literature an SCS (electron transfer at electrone) mechanism is preferred in MeCN. The substituent effect on the oxidation reaction and on the anodic luminescence is discussed.

12006-12-0 RL: PRP (Properties)

(anodic oxidation of dihydropyridines in presence of, electrogenerated chemiluminescence in relation to

13386-12-4 CAPLUS

Isobenzofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS

L29 AMSWER 52 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: 1981:112539 CAPLUS <u>Full-text</u> 94-112539

DOUMENT NUMBER: 34:112539
34:112539
THIRE: 94:11254
THIRE: Photopolymerisable iodinium and sulfonium salt system
NUMBUTON(S): Smith, George H.
PAIEMI ASSIGNEE(S): Smith, George H.
PAIEMI ASSIGNEE(S): Gere, Often, 25 pp.
CORNICON CORNICON DOUBLE OF THE PAIEMI ASSIGNEE SIGNEE SIGNEE

DOCUMENT TYPE: Patent

LANGUAGE: Ge FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|----------------------|------|----------|-----------------|---|----------|
| DE 3019211 | Al | 19801127 | DE 1980-3019211 | | |
| AU 7943483 | A | 19790531 | AU 1979-43483 | | 19790118 |
| AU 514944 | B2 | 19810305 | | | |
| US 4250053 | A | 19810210 | US 1979-40645 | | 19790521 |
| CA 1113638 | A1 | 19811201 | CA 1980-349909 | | 19800415 |
| SE 8003647 | A | 19801122 | SE 1980-3647 | | 19800514 |
| SE 446780 | В | 19861006 | | | |
| SE 446780 | C | 19870122 | | | |
| AU 8058559 | A | 19801127 | AU 1980-58559 | | 19800520 |
| AU 521591 | B2 | 19820422 | | | |
| PR 2457511 | A1 | 19801219 | FR 1980-11217 | | 19800520 |
| PR 2457511 | B1 | 19870130 | | | |
| GB 2053243 | A | 19810204 | GB 1980-16641 | | 19800520 |
| ZA 8002991 | A | 19810826 | EA 1980-2991 | | 19800520 |
| BE 883404 | A1 | 19801121 | BE 1980-200695 | | 19800521 |
| JP 55155018 | A | 19801203 | JP 1980-67687 | | 19800521 |
| JP 61002081 | В | 19860122 | | | |
| IORITY APPLN. INFO.: | | | US 1979-40645 | A | 19790521 |

The photohardening of materials polymerizable cationically (epoxy resins, one porconaronang or materials polymerisable cationically (epoxy resins, polyples, and the like or by radicals (winy) moments) can be initiated by the photodecompn. of UV-abnorbing triaryl sulfonium or diaryl lodonium complex salts 0.1-5 parts, where the aryl may be Ph, naphthyl, thinmyl, or furanyl, and the anion EPA or SaPF-. He addition of 10-100 of a floweresth polymyl compound, such as 1,3-diaryl-2-pyrasoline, isobemofuran, or commarin, extends the ometral excitation of the initiation. polyary compound, such as 1,2-duary-2-gyrardine, isomenomican, or commarin, extends the spectral sensitivity of the initiators, accelerates the polymerization, and allows the use of cheaper light sources. Thus, a coating solution contained an epoxycresol-novolac resin (m. 85-90°) 20 and Ph35.PP6

0.4 in Me200 30 parts. Coated onto a polyester film at 5 + 10-2 m (wet), oven-dried 5 min at 60%, emposed through a step wedge to a 500-4 MV lamp at 11.8 cm, followed by washing with Me200, left no hardened step even after a 10 min exposure, whereas with addition of 0.08 1, 1-64phapy-11.3,5-Mexatriene or of 1,3-diphery1-2-pyrasoline, 7 steps were solidified after 5 min.

nul tous (USES)
(photopolymerizable imaging composition containing)
RN 3586-66-1 CAPLUS
CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (24 CITINGS)

L29 ANSWER S3 OF 01 CAPLUS COPYRIGHT 2011 ACS ON STN
ACCESSION NOMBER: 1981:102255 CAPLUS Politerat
DOCUMENT NUMBER: 94:103255
CRIGINAL REFERENCE NO: 94:16851a,16854a

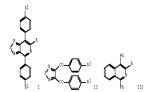
Reaction of 3.4-diarovl-1.2.5-thia-(or -oxa)-diazoles TITLE: mand o-dibenzoylbenzene with mineral acid salts of methylamines having an electron-withdrawing group Mataka, Shuntaro; Takahashi, Kazufuni; Tashiro, AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

mataka, Jaumrato; lakamashi, hazurumi; ashiro, Masashi, Tsuda, Yubsube Res. Inst. Ind. Sci., Kyushu Univ., Pukuoka, 812, Japan Synthesis (1980), (10), 842-3 CODEN: STNIRF; ISSN: 0039-7881

DOCUMENT TYPE: LAMGUAGE: OTHER SOURCE(S): English CASREACT 94:103255



88 The condensed pyridines I (X = 5, 0; R = COZET, COZDTe, cyano, B:; R1 = R, Me, C1) were obtained in 41-958 yield by treating II with SCC2002.SK (X = C1, SSO4). III (R = COZER, cyano) were similarly obtained.

17 7523-2-50 VXXX-56-12 TOXET-51-27 TOXET-51-27 TOXET-51-30-27

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of | 76593-55-0 CAPLUS

PN 1659-35-0 CAPLUS
CN [1,2,5] Oxadiazolo[3,4-c]pyridine-6-carboxylic acid, 4,7-dipbenyl-, ethyl ester (CA INDEX NAME)

76593-56-1 CAPUS [1,2,5]Oxadiazolo(3,4-c]pyridine-6-carboxylic acid, 4,7-dipbenyl-, methyl ester (CA NUBEX NAME)

76593-57-2 CAPLUS [1,2,5]Oxadiazolo[3,4-c]pyridine-6-carbonitrile, 4,7-diphenyl- (CA INDEX



الاعتدانية المعادية المعادية



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L29 ANSWER 54 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1980:549396 CAPLUS Full-text

DOCUMENT NUMBER: 93:149396 ORIGINAL REFERENCE NO.: 93:23803a.23806a

Chemiluminescence and oxidation reactions of phthaloyl

Chemilminecence and oxidation reactions of phthaloperoxide and related compounds
Generation, Narl Detricts, Steinfett, Manfred; Witt,
Peter; Petez, Christian; Posppel, Rarl Londing
Org, Chem. Inst., Iceh. Univ. Clausthal,
Clausthal-Fellerfield, D-3352, Fed. Rep. Ger.
Journal of Chemical Research, Synopses (1990), (6),
COMMEN. PROFOC, ISSN: 0308-2342
Journal CORPORATE SOURCE:

DOCUMENT TYPE: LANGUAGE: English/German

AB Some aromatic hydrocarbons (e.g. I) and heterocyclic compds. (e.g. II) exhibit chemiluminascence when treated with pthalogh peroxide or 4,5—dichlorophthalogh peroxide (III). III is less emplosive but also less effective. In the presence of 0, the reaction has aspra.70% higher maximum light intensity than under N, but aspra.20% lower light yields. It is proposed that singlet 0 is involved in the reaction, in contrast to the path proposed earlier (Schatzer, G.B., 1979).

If 100-100.00 100-100.00 100.

NOS-V-C-19 TOSINO-C-19 Bit SCI (Deactant); SPM (Synthetic preparation); PREP (Preparation); PACT (Reactant or reagent) (preparation and oxidation of) NS6-66-1 CARLUS Laobensofuran, 1,3,4,7-tetraphenyl- (CA DIDEX NAME)



16619-87-7 CAPLUS Isobensofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

L29 ANSWER 55 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: 1980:471612 CAPLUS Fell-text 93:71612

ORIGINAL REFERENCE NO.:

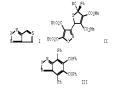
93:1612 93:1645a, 1646a Cyclosddition reactions of 4,6-diphenylthieno()3,4-0[1,2,5]oxadiazole and -[1,2,5]thiadiazole with acetylenes Louge, Otchibo; Tabata, Toshibai Res. Inst. Ind. Sci., Kyashu Univ., Fukuoka, 812, Jacob

CORPORATE SOURCE:

Japan

Japan Journal of Organic Chemistry (1980), 45(15), 2956-9 CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English OTHER SOURCE(S): CASERACT 93:21612



AB 4,6-Diphenylthieno[3,4-c][1,2,5]oxadiazole I (X = 0) with acetylenes to give 4.6-Diphenylthicol 3.4-O[1].2.5]osadisabol I (K = 0) with actylenes to give the corresponding 12 admicts, sym—C-queso-G-(S-iosaxaly)]-2.5-diphydrothiophene derivs, e.g., II, accompanied by benomadisables e.g. III. The reaction proceeds via initial formation of the cycloadmicts of acetylenes across the thiocarbonyl yield edipole. Subsequent ring cleavage of the oxadisable ring of initial strained cycloadmicts generates the nitrile oxide intermediates capable of underpoing cycloadmic to acetylenes to afford the 12 admicts, whereas desulfuriation of the initial cycloadmicts least to the formation of bemonadisables. I (K = 5) reacted with acetylenes to give the corresponding desulfuriate benothiadisables in good yields. 20190-2.5-20 (1915-3-19) 3/373-3-39.

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

NN 73770-72-6 CAPUUS

CN 2,1,3-Benzoxadiazole-5,6-dicarboxylic acid, 4,7-diphenyl-, 5,6-dimethyl ester (CA INDEX NAME)

RN 73770-73-7 CAPLUS

rsx 13/10-72-7 CAPUUS
CN Methanoce, (4,7-diphenyl-2,1,3-benzoxadiazole-5,6-diyl)bis[phenyl- (9CI)
(CA INDEX NAME)



RN 73770-79-3 CAPLUS
CN 2,1,3-Benzoxadiazole-5-carboxylic acid, 4,7-diphenyl-, methyl ester (CA

73770-82-8 CAPLUS

2.1.3-Benzoxadiazole, 4,5,7-triphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

L29 ANSWER 56 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1980:215181 CAPLUS <u>Pull-text</u> DOCUMENT NUMBER: 92:215181

DOUMBER MOMER: 92:2518181

FORGINAL PREFERENCE NO. 92:345451, 348546

IIILE: Synthetic routes to derivatives of polycyclic aromatic hydrocarbons using isobemofurans as transient rescrive intermediates

AUTHOR(5): Smith, James G; Welankiwar, Souths S., Shantz, Barry G; Lai, Erc Hz, Chan, Moreen G.

CORPORATE SOURCE: Dep. Chem., Univ. Materloo, Materloo, GM, NZL 3G1,
Car.

Journal of Organic Chemistry (1980), 45(10), 1817-24 CODEN: JOCEAH; ISSN: 0022-3263

Journal

DOCUMENT TYPE: OTHER SOURCE(S): CASREACT 92:215181

OTHER SOURCE(5): CASEBOIT 92:215181

B The known equilinium between the tautomers bensalphthalan and 1bensylisobensofuran, was emploited as a synthetic route to novel substituted
polycyclic aromatic compds. The isobensofuran was captured in a series of
Diels-Alder reactions to provide gony-brindged Dels-Alder admits.
Aromatization of these adducts by dehystation was generally effected by using
catalytic ands. of tolewessellogica caid. Alternatively, MeSicil-Bai was
superior in those cases where acid catalysis was unsatisfactory. The DielsAlder adducts formed by using quinous were best aromatized under nild basic
conditions (MaGNo-HoOH). When aromatization resulted in increased nonbonded
interactions among the substituents attached to the developion polycowich interactions among the substituents attached to the developing polycyclic aromatic system, mixts. containing the desired aromatic compound and a product in which dehydration did not yield the new aromatic ring resulted. This problem was obviated by using basic conditions to isomerize the product mixture to the fully aromatic derivative 2009-88-9

RE: BCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reactions of)
RO 13194-03-9 CAPUS
CN Isobeniofuran, 4,7-dipbenyl-1-(phenylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L29 ANSWER S7 OF 01 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1980:85188 CAPLUS Full-text DOCUMENT NUMBER: 92:85188

ORIGINAL REFERENCE NO.: 92:13873a.13876a TITLE:

Estination of triplet energies from electrogenerated

obschmidten of triplet energies from electrogenerate chemiluminescence: possibilities and restrictions Pragst, F.; Ziehig, R.; Boche, E. Sekt. Chem., Humboldt-Univ., Berlin, DDR-104, Ger. AUTHOR(S)

Praget, F.; Lichig, R.; Boche, E.

CORPORATE SOURCE: Sect. Chem., Humboldt-Univ., Berlin, IDR-104, Ger.

Den. Rep.

SOURCE: Journal of Lumineacence (1979), 21(1), 21-41

COURNET INDRAW, ISSN: 0022-2113

IDOUMENT ITPE: Journal

LAMMUNGE: Emplish

AB The advantages and disadvantages of electrogenerated chemilamineacence (BCI)

as a nethod for estimating triplet energies ET of organic compos. were

demonstrated in several examples involving strong, weak or molimineacent

compds. In many cases, ET can be determined within an error of 10.1 eV from

the thermodn. relations between electroches. and spectroscopic date, from EXI

quenching or from sensitize EXI. The method can also be successfully applied

to substances in which phosphorescence and delayed floursecence investigations

have field. Formation of encipleses and inverserabile reactions of the ion

radicals may lead to misinterpretation of the results. In such cases, admin.

measurements were carried out to confirm the interpretation of the triplet

mechanism and to rule out chemical complications.

Ri: PRP (Properties)

| 1999-0-1 | 1999-10-4 | REL PRP (Properties) | (Triplet energy of, determination by electrogenerated chemiluminescence) | 3586-66-1 CAPLUS

Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



13386-12-4 CARLUS

Isobenzofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L29 ANSWER 58 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1980:76414 CAPLUS Full-text DOCUMENT NUMBER: 92:76414

ORIGINAL REFERENCE NO.: 92:12587a,12590a

ACCESSION NUMBER: LOCUMENT NUMBER: ORIGINAL REFERENCE NO.: IIILE:

92:12587a,12590a A convenient preparation of [1,2,5]oxa- and [1,2,5]thiadiazolo[3,4-c]pyridines Mataka, Shuntaro; Takahashi, Kazufumi; Tashiro,

CORPORATE SOURCE: Res. Inst. Ind. Sci., Kyushu Univ., Fukuoka, 812,

Japan Synthesis (1979), (9), 687 CODEN: SYNTEF; ISSN: 0039-7881 SOURCE:

DOCUMENT TYPE: LANGUAGE -





AB The title compds. I (X = S, R = Ph, CR2OB, CO2Et, R1 = B, Me, C1; X = O, R = Ph, R1 = B) were prepared by treating II with RCH2OB2 in the presence of disabity-cloundecese.
17 NOVEC.51.

72624-47-60 RL: SPM (Synthetic preparation); PREP (Preparation)

(preparation of) 72624-47-6 CAPLUS

[1,2,5]Oxadiazolo(3,4-c)pyridine, 4,6,7-triphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L29 ANSWER 59 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1979:557110 CAPLUS Full-text

DOCUMENT NUMBER: 91:157110 91:25349a, 25352a ORIGINAL REFERENCE NO.:

TITLE: Electrochemical production of triplet states. VIII. Blectrochemical luminescence of isobenzofurans

Electrochemical luminescence of isobernofurans Siebig, Reinhard; Pragst, Fritz Sett. Chem., Bumbold-Univ. Berlin, Berlin, 108-104, Ger. Des. Rep. Eaitschrift foer Physikalische Chemie (Leipzig) (1919), 261(4), 755-803 COMEN: 20128; ISSN: 0372-9600 MITHOR (S) ORPORATE SOURCE:

Journal

DOCUMENT TYPE: LANGUAGE:



Electrogenerated chemiluminescence (ECL) of arylisobeniofurans I (R = Ph, Rl = H, Ph; R = p-MeOO6H4, Rl = Ph| was studied in DMP in mixed systems with H, Ph; R = p-McGOSH, R1 = Ph was studied in DMF in mixed systems with aromatic intro compto, acceptance amounts in an polyprolic aromatic bydrocarbons. A triplet energy of 1.60 ± 0.05 eV was found for all I from the min. ethalpy of the luminescence electron transfer and from sensitized BCL eapts. A singlet mechanism was shown in several BCL systems by measurement in a magnetic field.

BL: PRP (Properties)
(electrochem. luminescence of)
RN 3366-66-10 ACMLOS
CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



13386-12-4 CAPLUS [sobenzofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L29 ANSWER 60 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1979:38738 CAPLUS Cull-text DOCUMENT NUMBER: 90:38738

90:6235a,6238a ORIGINAL REFERENCE NO.: TITLE:

90:6253,6238 Carbovelizations and heterocyclinations of ortho-dibenzyl derivatives by the effect of sulfur Lepage, Locette; Lepage, Yess Lab. Chim. Org. A, USR Sci. Exactes Nat., Linoges, Fr. Journal of Beterocyclic Chemistry (1978), 15(7), 103-91 COORN: JHTCAD; ISSN: 0022-152X Journal French CASMEACT 90:38738

AUTHOR(S) CORPORATE SOURCE: SOURCE -

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):



1,4-Diphenyl-2,3-dibenyl-1,3-butadiene (I) was prepared by treating di-ER owalate with PACED/SC(α) and debytrating (PACED/SC(α)(COS)(COS)(COS)(CRED)2. Treatment of I with H-Fornoxoccioninide gave S,11-diphenylamphthacene. I reacted with S to give the thiophene II (X = S). II (X = Se) was obtained from I and Se02.

Benzothiophenes and naphthothiophenes were similarly obtained from other odibenzyl compds. and S, with benzo(a)aceanthrylene and indeno[2,1-a)fluorene compds. and by-product.

SCENE-AS-AS-RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI

nu not restant; ore (symmetric preparation); reser frequentially, not (Restant or research) [responding or research] [responding or resettion of, with acrylic soid)

10 3514-68-4 CARUIS

(N Isodemofuran, 1, 3, 4, 7-tetraphenyl-5, 6-bis(phenylmethyl)- (CA INTEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS

L29 ANSWER 61 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN

ACCESSION NUMBER: DOCUMENT NUMBER: ORIGINAL REFERENCE NO.:

APLUS COPPRIGHT 2011 ACS on STN
1971:179800 CAPPUS <u>Fail-test</u>
86:179800
86:128153,22136a
86:128153,22136a
86:128153,22136a
86:178100
86:18153,22136a
86:181536a
86:181536a CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

DOOMBHTTFE: Report
LINKNUMB: Russia

More woltage-luminosity characteristics of electroluminescence solns. (10-2 to 10-80) of pyrmen. Fluorecu, edipterplostatetraene, 1,1,4,4-tetraphenylbat-1,3-diene, 1,1,6,6-tetraphenylbat-1,3,5-triene, 6,1-diphenylathracene were studied. The intensity of the electroluminescence increases with decreasing amplitude of the exciting elect. field and the voltage-luminosity characteristics of the electroluminescence of the liquid organic electroluminescence are larged organic and the solution of radiation of the organic solns, including the formation of an intermediate product in the electrolysis process, the interaction of which leads to increased luminescences. increased luminescence.

RL: PRP (Properties)

(electroluminescence of, voltage-luminosity characteristics of) RN 3586-66-1 CAPLUS

Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



L29 ANSWER 62 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1977:155626 CAPLUS <u>Pull-text</u> 86:155626 DOCUMENT NUMBER:

UNLUMENT UNMERST DESIGNATION OF DESI

Regine Int. Org. Chem., Univ. Kiel, Kiel, Fed. Rep. Ger. Justus Liebigs Annalen der Chemie (1977), (1), 116-44 CODEN: JLACEF; ISSN: 0075-4617 CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: Journal

LANGUAGE:



AB Cycloaddn. of benooquinones I (R = H, Me, OMe3, Cl, Br; Rl = H, Me, Cl, Br; R2 = H, Me, CMe3, Cl, Br; R3 = H, Cl, Br; with isobenoforms II (R4 = Ph, substituted petery); R5 = H, Pr, R6 = H, Me, AMCSER; R1 = Ph, substituted phenyl gave epoxydibenood oncoins III and benoodisonles IV. 1,2—Nagth Enquinose, 9.10-phenotherneequinose, and fluoreathernee; 89.8-effects an underwent similar cycloaddn. with II. Intermediate isopolar transition states are involved. are involved.

35%-65-1 RL: PROC (Process)

(cycloaddn. of, with benzoquinones) 3586-66-1 CAPLUS

RN 3586-66-1 CAPLUS CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



IT 62422-69-37- 62012-91-75

NACOTOTIC COLLECTION

IN SPM (Synthetic preparation); PREP (Preparation)
[preparation and cycloaddn. of, with benooquinones]
60422-89-3 CRPUIS
Isobeniofuran, 5.6-bis(4-methylphenyl)-1,3,4,7-tetraphenyl(CA INDEX



Isobenzofuran, 1,3-bis(4-methylphenyl)-4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

L29 ANSWER 63 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 80:18437a.18440a

TNURNTOR (S) -

LANGUAGE: E: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A 19740108 US 1972-223770 US 3784376 19720204 PRIORITY APPIN. INFO.:

GI For diagram(s), see printed CA Issue.

88 Electrophoto, organic photoconductive layers having a higher speed than conventional layers containing furan deriva, and better light stability than high-speed layers contain, as the organic photoconductor, and isobemodiumn [1: R1, R2, R3, R4 = R, nalo, alryl, arryl, CM, OS, SECOMES, OF ECOMES, [65 = R or loves slipt] and R6 = a Cl-4 laylener); 21: 80, 5, or HDS, R7, R8 = substituted or unsubstituted aromatic groups; and n and n = 0-1. Thus, a photoconductive coating composition giving improved electrophotoc, properties is comprised of Lewan 145 polycarbonate rasis binder, asprx.154 1,3,4,7 tetraphraylisobemodium polycarbonate rasis binder, asprx.154 1,3,4,7 tetraphraylisobemodium polycarbonate variable (1-his (-thouyphenyl)-6-(4-analyskryrylleyrylium fluoroborate sensitizer.

RL: USES (Uses)

(electrophotog photoconductor)
RN 3586-66-1 CAPLUS
CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



L29 ANSWER 64 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1974:114479 CAPLUS Fuil-text

DOCUMENT NUMBER: 80:114479 ORIGINAL REFERENCE NO.: 80:18377a.18380a

80:183/a,E3080
Frequency-brightness characteristics of the electroluminescence of organic substances Steblins, B. V.; Steblin, V. I.
USSS
Libraral Pikikidenoi Spektroskopii (1974), 20(2), 304-5
COEBN: 2RBBM; ISSN: 0514-7506 AUTHOR(S):

CORPORATE SOURCE: SOURCE:

COCOMENT TYPE: Journal
LANGUNGE: Resistan

BB The frequencies of the elec. excitation at which the intensity of the He trequencies of the else. excitation at which the intensity of the electroluminescence is maximum Varian vera determined for 40 various organic compds. in DEC with addition of BtNNE as electrolyte. The luminescence was excited with 0.12-0000 Rr. Planary Pe electrodes were used. The compds. yielded mostly a single maximum Coly disabtlylamphthallers gave 4 maximum at 0.20, 0.10, 0.10, and 20 Rr. A correlation between the structure of the organic compds. and pmax was observed

IT 35%-66-1 RL: PRP (Properties)

RI: MRV (Properties)

(electroluminescence of, frequency-brightness characteristics of)

RN 3586-66-1 CAPAGUS

CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



L29 AMSWER 65 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1974:82486 CAPLUS Fall-text ACCESSION NUMBER: 1974:82486 CAPLA
DOCUMENT NUMBER: 80:82486
ORIGINAL REFERENCE NO.: 80:13265a, 13268a

Condensation in an acidic medium of o-dicarbonyl TITLE: compounds with 2,3-dihydronaphthazarone Peyrot, Martial; Lepage, Yves

AUTHOR(S): Peprox, Martial, Lessap, Yeas

COMPORATE SOURCE: Lab. Chim. Org. A, UER Sci., Linnegas, Fr.

SOURCE: Salletin de la Societte Chimique de France (1973),

(5-10, Rr. 2), 265-64

COURNENT TIPE: Journal

LANGUAGE: French

LANGUAGE: French

I For diagram(s), see printed CA Issue.

AB The condensation of 1,2-discylbensenes (II with 2,3-dihydronaphthazarone (II)

gives five 1,4-dihydroxy-5,2-maphthacenequinones (III), Re. M. Ph., Met. R. I Forwardinaphthacenes is obtained from 2,5-diphenyl-3,4
If screening the second of 1,5-discylbensenes is obtained from 2,5-diphenyl-3,4
I Screening the second of 1,5-discylbensenes is obtained from 2,5-diphenyl-3,4
I Screening the second of 1,5-discylbensenes is obtained from 2,5-diphenyl-3,4-

II \$1800-140. RL: RCI (Reactant); RACI (Reactant or reagent)

(ring cleavage of | RN 51870-10-1 CAPUS CONTROL | 1,3,4,7-tetraphenyl (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

L29 ANSWER 66 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1973:536185 CAPLUS Full-text DOCUMENT NUMBER:

DOCUMENT NUMBER: 79:136185 ORIGINAL REFERENCE NO.: 79:22073a,22076a

79:220713, 22076a
Photooxidation of isobemsofurans. Dual mechanism
process
Unneted, John, III; Akashah, Talal
Chem. Dep., American Gniv. Brirot, Brirut, Lebacon
Journal of the American Chemical Society (1973),
95(19), 6211-5
COEM: AGGART, ISSN: 0002-7863
Journal CORPORATE SOURCE: SOURCE:

LANGUAGE: English

Dimplish The photocoxin. Of several substituted isobemofurans was studied. Minetic behavior at low substrate concess, shows that a second mechanism other than that involving singlet 0 is operative, and the absence of asulane quenching demonstrates that the second sections involves direct addition of 0 to excited singlet isobemofuran. Bate consts. for this singlet substrate-ground state 0 reactions are in the range of 1010 MT. Sect. and the sectionism is calculated to contribute about 10% of the photocoxids, at high isobemofuran concentration, ranging upward to virtually 10% at lower substrate concess. The mechanism is suggested to be via charge-transfer rather than concreted addition, and the possibility of such an oxidation mechanism is generalized to other aromatic systems.

other aromatic systems. 528-96-1 (669-92-4 RU: RCI (Reactant); RACI (Reactant or reagent) (photocoxidn. of, kinetics of) 3586-66-1 CARLUS Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)

16619-87-7 CAPLUS
Isobenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

L29 ANSWER 67 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1973:442236 CAPLUS Full-test LOCUMENT NUMBER: 79:42236 CAPLUS Full-test CORIGINAL REFERENCE NO.: 79:6865a,6868a

Princola, Debba Synthesis of polycyclic quinones by carbanions Verine, Alain; Lepage, Twes Lab. Chim. Orgo. A, U.B.R. Sci. Exactes Nat., Limoges, TITLE: AUTHOR(S):

CORPORATE SOURCE: SOURCE: Bulletin de la Societe Chimique de France (1973).

(3) (Pt. 2), 1154-9 CODEN: BSCFAS: ISSN: 0037-8968

DOCUMENT TYPE

LANGUAGE: French
GI For diagram(s), see printed CA Issue

The dialdehydes (I and II) condense with cyclic y-diseasces (III; RR = naphtho, substituted bence or substituted furo) to give naphthacemedia derivas. (IV) and furomorphicoquinones (V), resp.
 II 355/6-0.3
 RE: SPM (Synthetic preparation); PREP (Preparation)

(preparation of | 3586-66-1 CAPLUS | Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



OS.CITING REP COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L29 ANSWER 60 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1973:135973 CAPLUS Fail-teat
LOCUMENT NUMBER: 78:135973
ORIGINAL REFERENCE NO.: 78:21833a, 21836a

78:21813a,21876a
Olonide rearrangement in the photooxidation of phenyl-substituted isobensofurans
Nehavandi, F.; Bazmara, F.; Stevens, M. P.
Chem. Dep., Univ. Bartford, Hartford, CT, USA
Tetrahedron Letters (1973), (4), 301-4
COORN: TELERY; ISSN: 0040-4039 AUTHOR(S): CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

DOOMBRI TYPE: Journal
LAWRINGE: English
GI For diagram(s), see printed CR Issue.

Photoxxidn. of l,3-diphenylisobenzofuran, using either s Hg lamp or sunlight
as the w source, gave, in addition to O-dibenzoylbenzene and an insol. dimer,
15% of the keto ester (I, R = RI = H) by a Wieland-rearrangement of the l,2diphenyl-3-de-benzoyclobardisee connoise intermediate. Similarly, 13,4,7tetraphenyl and hexamphenylisobenzofuran gave .apprx.30% I (R = Pb, R1 = H and
Dr zerol.

tetrapress_z Ph, resp.]. '525-66-1 16618-87-3 RL: RCI (Reactant): RACI (Reactant or reagent)

RN 3586-66-1 CAPLUS

CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



CN Isobenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



L29 MISHER 69 OF 81 CAPLUS COPPRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1972:551764 CAPLUS Full-text
DOCUMENT NUMBER: 71:151764
DOCUMENT NUMBER: 71:151764
DETIVATIVES OF DEWARDAMPHYLISODENDOFULTAN
TITLE: 0. 1712:24966, 24947a
URL VARIABLE NO. 1712:3496. 24947a

AUTHOR(S): Razmara, Fereidun; Stevens, Malcolm P. Dep. Chen, Am. Univ. Beirut, Beirut, Lebanon Journal of Chemical and Engineering Data (1972), CORPORATE SOURCE: SOURCE:

17(4), 511-13 CODEN: JCEAAX; ISSN: 0021-9568

DOCUMENT TYPE: LANGUAGE: English

LAMBORGE:

To diagram(s), see printed CR Issue.

AB Disk-Alder adducts [R = CR], R = CR, R = CR, R = R] = R; $I \in R$.

AB Disk-Alder adducts [R = CR], R = CR, R = CR, R = R] = R; R = R

II 15613-877 RL: RET (Reactant); RACT (Reactant or reagent) 16619-87-7 CAPLUS
Isobenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



TITLE:

L29 ANSWER 70 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1971:498522 CAPLUS Full-text DOCUMENT NUMBER: DOCUMENT NUMBER: 75:98522 ORIGINAL REFERENCE NO.: 75:15577a,15580a

Formation of o-dibensylated polycyclic beterocycles through a new derivative of 1,4-diphenylbutadiene Lepage-Lonne, Lucette; Lepage, Yves Lab. Chin. Org. A, U. E. R. Sci. Exactes Nat., CORDORATE SOURCE

SOURCE:

Linoges, Fr.

Linoges, Fr.

Comptes Rendus des Seances de l'Académie des Sciences
Serie C: Sciences Chiniques (1971), 272(26), 2205-7

CODEN: CHDCAQ: ISSN: 0567-6541

DOCUMENT TYPE: LANGUAGE:

MBMI TYPE: Journal
IMMGE: French
Treatment of Et oxalate with excess PhCE/MgCl gave 254
Treatment of Et oxalate with excess PhCE/MgCl gave 254
(PhCE/20/20 COB) (COE) (CEDPa) 2 (1), 10% ENCONCOE) (CEDPa) 2 and 20%
PhCE/COC/END (CEDPa) 2. Twas edwarfsted with POII in pyridine to give
PhCE/CCEDPa) (CEDPa) 2. Twas edwarfsted with POII in pyridine to give
PhCE/CCEDPa) (CEDPa) 2. Twas edwarfsted with DCE/DEA to 4,5diberoup-1,2-disberoul-fermanty-1,3-disperous-boomenofursan (III), which was
further dehydrated with chloranil. Reaction of III with Er gave 4,5-diberoyl2-diberous-fermance), which was condensed with furtariate to 6,5-diberoyl-1,2-dibenzoylterphenyl, which was condensed with hydrazine to 6,7-dibenzyl-1,4,5,8-tetraphenylphthalazine.

IΓ

23574-62-49
RL: SPN (Synthetic preparation); PREP (Preparation)

RN 33574-68-4 CAPLUS CN Isobenzofuran, 1.3. Isobenzofuran, 1,3,4,7-tetraphenyl-5,6-bis(phenylmethyl) - (CA INDEX NAME)



L29 ANSWER 71 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1969:24114 CAPLUS Full-text

DOCUMENT NUMBER: 70:24114
ORIGINAL REFERENCE NO.: 70:4523a,4526a

TITLE: Purity-property relations in organic semiconduction Driscoll, John S.; Kwan, Stephen C.; Berger, Abraham AUTHOR(S):

W. Boston Lab., Monsanto Res. Corp., Everett, MB, USA U.S. Clearinghouse Ped. Sci. Tech. Inform., AD (1968), AD-669352, 116 pp. Avail: CFSII From: U.S. Gout. Res. Develop. Rep. 1968, 68(14), 134 CODEN. XCCIAV CORPORATE SOURCE:

LANGUAGE: English

DRAMAGE: English
The removal of naturally occurring impurities from omazole scintillators restored both the dark and photocond. The addition of charge-transfer soceptors (e.g., chloranill reduced the Ip/Id (photocurrent/dark current) ratio in the host at concern. as low as 0.0000 mole fraction. Impurities reduced both Ip/Id and solid-state floorescence values. Ms salicylate and 13,4, 6, lettappenjisobenocrawa were also studied. The dark conds. of the cyanine (photosensitizing) dyes showed a decrease in activation energy with increasing sol, conjugation. Flash photolysis was investigated as an anal. tool. Triplet-state absorption in anthracene was absent when highly purified researchs were used. reagents were used.

2365-62-1
RE: PRP (Properties)
(elec.-semiconducting properties of, purity effects on)
3586-66-1 CAPGUS

Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



TITLE:

Blectrochemiluminescene of 2,3,6,7-tetraphenylisobeniofuran and derivatives 2weig, Arnold INVENTOR (S)

American Cyanamid Co. U.S., 7 pp. CODEN: USKKAM PATENT ASSIGNEE(S): DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|----------|
| | | | | |
| US 3399328 | Α | 19680827 | US 1965-509148 | 19651122 |
| NL 6615201 | A | 19670523 | NL 1966-15201 | 19661027 |
| BE 689964 | Α | 19670522 | BE 1966-689964 | 19661121 |
| PRIORITY APPLN. INFO.: | | | US 1965-509148 A | 19651122 |
| | | | US 1965-513580 A | 19651213 |
| | | | US 1965-513584 A | 19651213 |

Mod 1985-31384 A 1951213

Ref of diagnam(s), see printed CA Issue. 1985-31384 A 1951213

Strong electroluminescence is observed in MedMCBO solms. containing 5-10 millimoles of I-V and up to 0.1 mole electrolyte, when a.c. voltage of 6-7 v. is applied. I, m. 803-4-9, is prepared by refluming 20.8 g. trans-14-diperpluntatione and 23.6 g. trans-dimenoplethylene in 350 ml. isopropanol b hrs. The intermediate addict (VI), was 1,2-6-limbony(-1,5-6-limbony)-1-6-cyclohesene, m. 179-80° (BURNe); Br (4.3 ml.) in 90 ml. CRCI3 is added to 18.5 g. VI in 130 ml. refluxing CRCI3, refluxing outsineed for 20 min. to yield 16 g. 1,2-dihemony(-3,5-diphenylhemone, VIII), m. 2129; 3 g. activated In is added to a solution of 3 g. VII and 3 g. Nuglin in 50 ml. ROW, refluxed until the liquid is yellow, then filtered into 15 ml. ROW. 1900. Upon addition of 10 ml. ROW, 2.1 g. of intensely green fluorescent cruste I, m. 158-9°, is obtained which is recryst. From COBGS and further purified by sublimation. Also prepared are II, m. 1233-5°, III, m. 125°, V, m. 155-6°, and V, m. 266-8°. IN 585-10-6° (1305-13-6°)

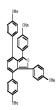
| INDEX.12.09 | INDEX.13.09 | PREP (Preparation) | PREP (Preparation) | (preparation of | 3586-66-1 CAPLUS | Isobeniofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



13385-80-3 CAPLUS
Isobenzofuran, 1,3-bis([1,1'-biphenyl]-4-yl)-4,7-diphenyl- (CA INDEX



13385-81-4 CAPLUS
Isobenzofuran, 1,3,4,7-tetrakis(4-methoxypheny1)- (CA INDEX NAME)



13386-12-4 CAPLUS

CN Isobenzofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



13386-13-5 CAPLUS
Isobenzofuran, 4,7-bis(4-methoxyphenyl)-1,3-diphenyl- (CA INDEX NAME)



L29 ANSWER 73 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1968:43601 CAPLUS <u>Full-text</u> 68:43601

DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: 68:8491a,8494a

TITLE:

Investigation of the mechanism of some electro-chemiluminescent processes Eweig, Arnold; Hoffmann, Arthur Kentaro; Maricle, AUTHOR(S):

Deeig, Arnold; Hoffmann, Arthur Mentarc; Maricle, Donald L.; Maurer, Arthur H. American Cyanamid Co., Stanford, CT, USA Journal of the American Chemical Society (1968), 90(2), 261-8 CODEN: JASCAT; ISSN: 0002-7863 CORPORATE SOURCE:

LANGUAGE: AB Doub English

Double-potential-step expts. and spectroscopic measurements, including quantum yield and additive studies, were made on isobennofurans and other electrochemiluminescent substances. Preannihilative emission is commonly

13386-12-4 CAPLUS
Isobersofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

L29 AMSWER 74 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1967:469169 CAPLUS Full-text 67:69169 DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 67:13011a.13014a TITLE:

67:1001a,1000a Electrochemiluminescence of aryl-muhatitated isobencofurans, isoinobles, and related substances Desig, Arnold; Metiler, Gerlinder Maurer, Arthur E.; Robetta, Bernard George American Cymamid Co., Stanford, CT, USA Journal of the American Chemical Society (1967), 89(16, 4891-8 COMEN: ANSAN, ISSN: 0002-7863 Journal MITHOR(S) -

CORPORATE SOURCE:

Journal English

OTHER SOURCE(S): CASREACT 67:69169

The electrochemiluminescence emission, polarographic half-wave oxidation and reduction potentials, anion- and cation-radical stabilities, fluorescence reduction potentials, minor and cation-radical stabilities, fluorescence spectra, and fluorescence efficiencies of a number of aryl-substituted isobernofurans, isolatedles, and similar computs, have been examined in RNUMMC2 solution. These data, together with M.O. calons., penul several types of structure-property comparisons to be made which provide insight into the factors which affect ion-radical stability and electrochemiluminescence. 30 references.

1203-01-24.

12326-12-2 BU. RPP (Properties) (lifetimes and oxidation and reduction potentials of) 1336-12-4 CMRUM Lobernofuran, L)-bis(4-methoxyphenyl)-4,7-diphenyl-



II 3586-65-1 13385-80-3 (3385-61-4 13386-13-5 15613-67-7 16615-69-2

RL: PRP (Properties) (luminescence (ele

nce (electrochemi-) and visible and uv spectrum of) 3586-66-1 CAPLUS

Isobenzofuran, 1,3,4,7-tetraphenvl- (CA INDEX NAME)

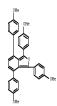


Isobenzofuran, 1,3-bis([1,1'-biphenyl]-4-yl)-4,7-diphenyl- (CA INDEX



13385-81-4 CAPLUS

Isobenzofuran, 1,3,4,7-tetrakis(4-methoxypheny1)- (CA INDEX NAME)



Isobenzofuran, 4,7-bis(4-methoxyphenyl)-1,3-diphenyl- (CA INDEX NAME)



16619-87-7 CAPLUS

Isobenzofuran, 1.3.4.5.6.7-hexaphenyl- (CA INDEX NAME)



16619-89-9 CAPLUS
Isobenzofuran, 4-(9-anthracenyl)-1,3,7-triphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

L29 ANSWER 75 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1967:99953 CAPLUS <u>Full-text</u> 66:99953

DOUMBERT LUMBERS: 66:99903
GENERAL REFERENCE NO. 66:1247a,1250a
HILLE: Mechanism of electrochemiluminascence
ADIROR(S): Design Armold; Boffmann, Arthur Kentaro; Maricle,
Design L., Maurer, Arthur H.
CORPORATE SCURCE: Am. Openanid Co., Stanford, CT, USA
CHEMICAL COmmunications (Lomento (1967), (3), 106-8
CORRECT CORRECT LISSN: 0009-2418.

DOCUMENT TYPE: Journal LANGUAGE: English

AB A study was made of the luminescent oxidation of the anion, and reduction of A study was made of the luminescent oxidation of the anion, and reduction of the cation, of anyl isoberonizorus and W-methylinoles, under potential limiting conditions. The fluorescer ions underwent electron transfer resulting in electrochemiluminescence under the pre-annihilative conditions. Bach emitter had a characteristic pre-annihilation energy input threshold. The potential was limited chemical by adding compds. such as 1,2,4,5-tetrasethocybennee to the iso-frame. The mixed systems electrochemiluminescend dimly with the emission characteristic of the isofuran, whose triplet energy could not be found. These results are discussed. 355,40-3. 1336-134.

RE: FRP [Properties] (electrochemiluminescence of, electron transfer in)

(electrochemiluminescence of, electron transfer in)

RN 3586-66-1 CAPLUS CN Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



RN 13386-12-4 CAPLUS CN Isobenzofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



L29 ANSWER 76 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN

L29 MORRER R OF 21 CARUS COPTRIEST 2011 ACG on STN
ACCRSSION MORRES
1 956-12701 CAPRUS Fall-test
CORNELL HARGER: 55-12701

ORGISTAL REFERENCE 10.: 55:13500-e

IIILE: Oxidation, reduction, and electrochemiluminescence of arylambitituded isobennofurans and isoindoles

AUTHOR(5): Davis, Armold Metaler, Gerlinde; Maurer, Author;

Roberts, Bernard G.
CORPORATE SCURCE: Journal of the American Chemical Society (1966),
881(7): 2064-5

88(12), 2864-5 CODEN: JACSAT; ISSN: 0002-7863

Journal

DOCUMENT TYPE: LANGUAGE: English

LANGUAGE:

English

The electrochemiluminescence (BCL) and related properties of 1,3,4,7tetraphenylisobeneofusn (I) and the effect of structural modifications on
these properties were reported. I exhibited an intense green fluorescence in
HROMMAC (BUT) solution in BCL emission was identical spectrally with the
fluorescence emission. Lifetimes of 1 sec. were indicated for both the cation
and disaion. Substitution of the para positions of the Pm substituents on the
furan ring with Med groups to give 1,3-bis[-mainsyl14,7-diphenylisobensofusn
failed to improve the stability of the cation radical; the position of its
fluorescence maximum was efficient to 560 mm. J. Basic_bubinosil. of 7. failed to improve the stability of the cation radical; the position of its flowescence maximum was shifted to 568 mm. 1.3-8is(-biphenyl)-4, 7-diphenylioobensofuran provided a bathontonic shift of the maximum to 540 mm, but diminished BC intensity, p-MeS substitution on the Ph groups on the bears ring of I led to a hypochronic shift of the flowescence maximum and decreased EC intensity, 1.3,4,7-Tetrabis(p-anisyl)isobensofuran had 547 mm. max; 1,3-diphenyl-4,7-bis[p-anisyl]isobensofuran had 515 mm, maximum M-Methyl-1,3,4,7-tetraphylisoindole and M-methyl-1,3-bis[p-anisyl-14,7-diphenylisoindole were strong floorescers in DEF with maximum at 490 and 507 mm. personners.

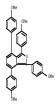
иц, resp. 2026-56-1, Isobenzofuran, 1,3,4,7-tetraphenyl-11 (36-34-1, Isobensofuran, 1,3,4,1-tetraphenyl2013(9-9-2), Isobensofuran, 1,3-ind(4-highenyl)-4,7-diphenyl3025(9-2,4), Isobensofuran, 1,3-ind(4-highenyl1009-11-4, Isobensofuran, 1,3-ind(4-highenyl1009-11-4, Isobensofuran, 1,3-ind(4-highenyl1009-11-3,5-isobensofuran, 4,3-ind(4-highenyl1009-11-3,5-isobensofuran, 4,3-ind(4-highenyl1009-11-3,5-ind(4-hig



Isobenzofuran, 1,3-bis([1,1'-biphenyl]-4-yl|-4,7-diphenyl- (CA INDEX



13385-81-4 CAPLUS
Isobenzofuran, 1,3,4,7-tetrakis(4-methoxyphenyl)- (CA INDEX NAME)



Isoben zofuran, 1,3-bis(4-methoxyphenyl)-4,7-diphenyl- (CA INDEX NAME)



13386-13-5 CAPLUS
Isobenzofuran, 4,7-bis(4-methoxyphenyl)-1,3-diphenyl- (CA INDEX NOME)



OS.CITING REP COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L29 ANSWER 77 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1965:488677 CAPLUS Fall-text DOCUMENT NUMBER: 63:88677

ORIGINAL REFERENCE NO.: 63:16272c-m

TITLE: 1.4.5.8.9.10-Hexaphenvlanthracene 1,4,5,9,1,11-Bexapbeny)antrascene Lepage, Yes; Pouchot, Olivier College de France, Paris Bulletin de la Societe Chimique de France (1965), (8), 2242-4 COMEN: BSCFRS; ISSN: 0037-8968 AUTHOR(S): CORPORATE SOURCE:

Journal

LANGUAGE: French

Re 1, 1, 5, 2, 9, 10-Bezephenylanthracene (I) was synthesized and its photoxidation and isomerization by acids studied. 5, 8, 9, 10-letraphenyl-1, 4-anthraquinone (4 g.), 2 g. 18, 182002, 2 g. KI, and 200 or. Ac@R refluend 8 ins. gave 3, 3, p. pale g.), 2 u NaPACO, 2 g. KI, and 200 cc. hc00 refined 8 hrs. gave 3.3 g. pale pellow II, a. 25-24 (typlen). II (5.4 g.) and 516 cc. Philif ru. 12 g. Li, 68 cc. Philir, and 800 cc. dry C606 stirred 2 hrs. gave 5.4 g. 1,4,5,8,9,10-hemspheryl-1,4-dihydrowyl-2,3,4-tetrahydrowshtracene (IIII), a. 255-4* (C606 and 6-108 issues of III), a. 262-6* (typlene). III (10.200 g.) inixed with 6 to volume silica gel containing I3% CaSO4, stirred with 4 cc. dry C606, and exporated in veno, and the residue heated 4 hrs. at 155*/15 m. and extracted with C606 yielded 70% yellow II, n. 355-6* with a color change to orange at 250°. I (0.150 g.) in 150 cc. C52 bubbled 5 min. with 0 and irradiated at -50° during 0.5 hr. with a Philips Philors SF 500 lamp gave 0.103 g. IV, n. 265-70° (decomposition and weak luminescence) (Ac081). IV 0.0453 g.) heated at 180-250° gave 1.38 cc. 0 and regenerated I. I (0.031 g.) in 1 cc. dry C686 and 0.5 cc. 080 H2504 heated in a sealed tube 45 min. at 130° yielded after recrysts. from C886 solwted issence of I. n. 230°, which dired (5.5 hr. at 130° gave the pure issence (V), n. 253-110° (CRID). trans-ISCH:12 (2.15 q.) and 1.5 q. (PCR:CR) 2 tused 10 sin. yielded 983 3.4-dibmonyl-2,5-diphenyl-yclohexene (VII), n. 180-1° (PCR); in the presence of traces of acid 1,3.4,7-letraphenyl-4,7-dishydroisobennofuran (VII), n. 251-2° was obtained. VII in AcoR containing RCI heated 2 min. yielded VII, n. 251-2° (ACR). VIII (1.75 q.) and 1.2 q. chloredli in yielded VII, n. yielded 55 yyllow 1,3.4,7-letraphenylisobennofuran, n. 255-6° (syptem). VII (2 g.) in 150 cc. ACRD hydrogenated over Raper VII gave 3,6-finishnozyl-2,5-diphenyl-yclohexane (VIII), n. 148-8° (cyclohexane). VIII (1.600 g.) in 50 cc. RCRD hydrogenated over Raper VII gave 3,6-finishnozyl-2,5-diphenyl-yclohexane (VIII), n. 148-8° (cyclohexane). VIII (1.600 g.) in 50 cc. RCRD hydrogenated over Raper VII gave 3, with 0.6 g. Likliki in small portions and kept 3 hzs. yielded 734 1,4-diphenyl-2,3-bis (phenyl)dycrognethyl) cyclohexane, n. 160° (cyclohexane). The w spectra of IV, V, VIII, VIII, and p-terphenyl are recorrised.

NSS-5-6-19, Isobennofuran, 1,3.4,1-tetraphenyl-RCR REPR (PCReprantation)

RL: PREP (Preparation)

(preparation of | 3586-66-1 CAPLUS Isobensofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L29 ANSWER 78 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN

Hebrew Univ., Jerusalem Tetrahedron (1964), 20(2), 195-209 CORPORATE SOURCE: CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

LAMKARGE:

Moravilable

GI For diagram(s), see printed CR Issue.

AB Various attempts were made to synthesis 1,4,5,8-tetraphenylamphthalene (I), of interest as the lower homolog of rubrene (II) and 1,4,3,10-tetraphenylamthracene (III). MeXDO::tplond:00286 (1,8 g,0) and 2 g.

[PURICRI) heated 5 hrs. at 140° gave 198 di-He 3,6-diphenyl-3,6-diphrophelhalate, n. 101° (MoRR), dehytorquested in boiling PMDO2 to the known di-He 3,6-diphenyl-bhalate, trans, trans-[PURICRI] (20.6 g,1 and 23.6 g.

trans-BCHCCRSE refluend 8 hrs. in 350 al. iso-PCHS yielded 528 YV, n. 178-80°, and an isomer, n. 120°. The addition carried out 8 hrs. in 100 al. boiling BodW gave 8 g, material, n. 175°, which (10 g,1 was refluend in 150 al. Ac08 and the hot filtered solution cooled to give 5 g. TV, n. 178-9° (BudWe). The insol. fraction (4 g,) recrystd, from BudWe gave V, n. 245°. IV

(18.5 g.) in 150 ml. boiling CRC13 refluxed 20 min. with 4.3 ml. Or in 90 ml. CRC13 yielded 860 3.6.1, 2-PuBs120582 (VI), m. 212°. VI (3 g.) and 3 g. NaOS in 5 ml. boiling alc. treated with 3 g. activated In dust and the mixture refluxed with the liquid was yellow yielded 73 VII, m. 255-9° (OSS). The adduct of VII with maleic anhybrize sid not give I, dissociating at high temps, and giving option composition. VII (5.45 g.) and 2.6 ml. freshly distilled RECCREND refluxed No min. in the presence of a trace of hydroquinone yielded 918 VIII, m. 178-80° (dissociation), deep red color in concentrated RECOM; 2.4-shinitrophenyllydratones m. 226-7° (ROMERUS). VIII (3 g.) in 23 al. Action stirred 1 hr. at room temperature gave 56% 1.4,5,5-tetraphenyl-2-capabitalehyde (IX), m. 255' (ACMO xyglees). VIII (2 g.) in 100 ml. Analytous slc. saturated at 0° with BCI gave, after 24 hrs., x-chloro derivative of I, m. 221° (Goccomposition). IX (1.1 g.) and 0.1 g. 108 Pack bestef 5 hrs. at 210-300° (Goccomposition). IX (1.1 g.) and 0.1 g. 108 Pack bestef 5 hrs. at 210-300° n. AD' (ACOB or Xylene). VIII (g., 1 m 100 ml. annyarous alc. acturaces at Viviath BCL gas, after 20 km s., a-chloro derivative of 1, m. 22% (decomposition). IX (1.1 g.) and 0.1 g. 108 Pack heated 5 km s. at 210-300° yielded 584 1, m. 266 (COBB), giving intense violething flourescence in COBB or COBAL2, not isomerised in boiling BCOM2 or in cold 800 REDOM. VII and the following discopshiles refluxed in COBB gave adducts (discopshile, m.p., (decomposition), and 4 yield given): RECOMBOOME, 187, ND, McCHENGED, 184, 61), AcELTRICA, 185, 75; BCDCOMS, 280, 55; CLCOMS-GREDOM, 267, 72; p. benoquinose, 279, 66; 1, 4-asphotpoinose, 279, 67, 68, 1, 4-asphotpoinose, 279, 67, 68, all adducts showed a tendency to dissociate at high temps. it was impossible in many instances to effect aromatisation by active debytration. The MCOCCHECU adduct (2 g.) treated with 1 g. p-McCOBASONB in 25 ml. AcOB 12 km s. yielded 454 Mc 1, 4, 5, 2 tetrapheryl-2-naphthoute, m. 205°. The ECOLURON adduct (1 g.) and 20 ml. AcOB saturated with gaseous BHz and kept 12 km s, and the precipitate freed from the VII formed by dissociation of the adduct by washing with COBB gave 654 1-4-void-0-1, 4, 5-4-tetrapheryl-2-naphthoute, m. 100°. the VII formed by dissociation of the addoct by washing with CSMS quee SS 1,4-winde-1,4,5 heteraphysel-2,5 l.4- tetraphysel-2,5 heteraphysel-2,6 heteraphysel-3,6 heteraphyselmi. annycross round constanting is g-per-consolous gave an inscrine causet, m. 180°, v1700, 1705 cm.-1, with the same infrared absorptions as those of the original adduct (v1700, 1083 cm.-1). Under these conditions X only underson stereoiscomerisation. TV (221.0, 1 and I, a sizepy HROW refluxed 3 have a 200 ml. ackD yielded 984 V, m. 266°, unreactive with maleic anhydride. V behalf bit at 650-100° visit 108 Per-Capex VIII, m. 106°, giring an intense wine-ref reaction with warm concentrated REOM. TV (1.6 g), and 20 g, and 20 g, the contractive of the contractive visit of the visit visi anhydrous NaORc in 20 ml. boiling AcOH treated with 12.8 g. Br in 80 ml. AcOH yielded 82% the 3.6-dibrono derivative, m. 223-4°, converted by dehydrobromination in boiling xylene into VI, and transformed by refluxing 30 dehydrobromization in boiling sylene into VI, and transformed by refluxing 30 min. with excess alc. 20 NO0 into 240 3,6-dipheryl-3,6-direct-1,2-dihencoyl-1-cyclotexen, n. 204. T. V(4.4) g. and 0.6 g. Se heated 20 min. at 220° gave 2,3,6,1-tetrapherylisoberoschinophere (XIII), n. 287°, also prepared by heating 2.2 g. V and 0.2 g. Sa tiofo vintervolution of EES. Both VII and XIII were sensitive to light, and irradiation in CRI3 in the presence of 0 brought about conversion into VI. Application of the Michael reaction resulted in a new synthesis of the Known 2,1-dipherylanghthalene and the preparation of 1,3-6-tripherylanghthalene (XIV), n. BCHCOUNGE 1,2, 9, 1, 1.6 g. PROECHE in 250 al. anhydrous EtO and 0.7 S., Na 16 S. M. anhydrous EtO anhydrous EtO and 0.7 S. Na 16 S. M. anhydrous EtO anhydrous EtO

resides distilled at 185-79/0.2 mm., and the distillate triturated with MeSR pielade 683 3.5 ciphteph-2-cyclobersone, m. 83-47, hydrogeated in ECOs with 104 P4-C to 3.5-diphemylcycloheranone (NVII), m. 140° (MeSR); 2,4-dimitrophemylhydrasone m. 174-67; semicarbanone m. 200° (MeSR); 2,4-dimitrophemylhydrasone m. 174-67; semicarbanone m. 200° (MeSR); 2,4-dimitrophemylhydrasone m. 174-67; semicarbanone m. 200° (MeSR); 30 ml, tert-BoGB treated 1 hr, at 60-10° (exothermic) with 12 ml, 45% appears MCGB quere 448 3-hydroy-4-co-3-phemylcycloheran-1-carbanylate, m. 128-90° (MeSR) [2,4-dimitrophemylhydrasone m. 206-7° (BCOR)], hydrolyzed, decarboxylated, and dehydrated to give 593 3-phemyl-2-cycloheranone (NVIII), m. 64-5°; 2,4-dimitrophemylhydrasone m. 256-8° (BCOR). tert-BogG (3.1) containing 10 g. Nar Pellowed 10 nr. with stirring with 213 g. Mc2N(CR2) 2009s. RCI and 110 g. D. RCZN(CR2) 2009s. RCI and 110 g. D. RCZN(CR2) 2009s. RCI and RCZN(CR AcCH2CO2Bt and the crude product refluxed 4 hrs. in 2 1. 10% aqueous NaCH yielded 66% XVIII, hydrogenated (1 g.| in 20 ml. EtOAc with 0.2 g. 10% Pd-C 4 yielded 668 WIII. bydrogenated (1 q.) in 20 ml. EvOke with 0.2 g. 100 HeV-0 H. S. at 20%) is troppheric to 3-perplycylcheanson (XIII, b) 311-22°; 2,4-dimitropherylhydrasone n. 167° (alc.); semicarbasone n. 167° (alc.). XII (2 g.) and 4.2 g. hCdh:CRE treated (cooling bath) with 2.5 ml. 20 alc. BOB 15 min. gave a small around of XII and 758 2-ono-phenyl-2,3,4,5,6,7,8,10-octahydrosphthalmen (XII, b) 02 165-6°. XII (5 g.) in BCD treated with PHRBB6 16.28 g. PhRR. 9.08 g. By in BCD and the mixture refluence 2 mrs. yielded 55% 2,7-diphenyl-4,5,6,7,8,10-heanyldrosphthalmen, m. 94°, which (1 g.) was heated with 0.4 g. 5 H. hrs. at 200° to give the known 2,7 diphenyl-aphthalmen, m. 142°. Thus, the reaction of XII with hCdBCRC converged realizable in the 2 and not in the 3 laterative forestition. occurred exclusively in the 2-, and not in the alternative 6-position. AcCH:CH2 (5.5 g.| in 40 ml. 1:3 MeOH-C6H6 added slowly with stirring to 10 g. R. 2-coo-4,6-dipenyl-3-cyclohesme-l-cathonylate and 0.1 g. McGMe in 100 ml. 21 McGMC-G6a and the mixture kepf 5 trs. gave 163 RE 2-coom-1-2-consthyl-4,6-dipenyl-3-cyclohesme-l-cathonylate, n. 158-9° (AcGM), and 14.54 ML, n. 166-8° (McGM). XII (5 g.) in 50 ml. 4:1 CoBGHZ 08 gave 3 hrs. at room temperature with Phighe (from 2.3 g. Phig. 0.4 g. Mg) in 50 ml. E20 yielded 684 tertiary alc. (XXII), n. 11-2° (McGM-E00). XXII (1 g.) and 0.2 g. 109 close 1064 triary alc. (XXII), n. 11-2° (McGM-E00). XXII (1 g.) and 0.2 g. 109 close 1064 ML, n. 155°. In the conversion of NV to 3,5-dipenyl-2-cyclohesenone, the primary product was XXI, gradually converted completely by boiling with alkali. Ripherpl and (CEOLO) in PhMO2 yielded 128 3-(4-biphenyl-1-cyclohesenone, the primary product was XXI, gradually critical (128 -1-(4-biphenyl-1-cyclohesenone, the primary product was XXI, gradually grided 128 3-(4-biphenyl-1-cyclohesenone, the primary product was XXI, gradually grided 128 3-(4-biphenyl-1-cyclohesenone, the primary product was XXI, gradually grided 128 3-(4-biphenyl-1-cyclohesenone, 253-4° (EROR-s-loc.). The tetralone (5.5 g.) in 50 ml. ROZ oxided to Phigher (0.6 g. Ng. 4.8 g. Phigh in 30 ml. ROZ, the mixture refluence in the product decomposed with squeens MROI yielded 68 Nl. 7-diphenyl-1-2,3,4-textydyro-1-asphthol, m. 103-4°. The experiment repeated and the product decomposed with Phisphenyl-10 (1-1-phisphyl-1-4-diphenyl-1-2,3) the yield 1,1-diphenyl-1-giphenyl-1-2,3,4-textydyro-1-asphthol, m. 103-4°. The experiment repeated and the product decomposed with the product of the prod Et 2-oxo-4,6-diphenyl-3-cyclohexene-1-carboxylate and 0.1 g. NaCMe in 100 ml. 2:3 MeOH-C6H6, and the mixture kept 5 hrs. gave 16.5% Et 2-oxo-1-(3-oxobutyl)-

residue distilled at 185-7°/0.2 mm., and the distillate triturated with MeCH

bands were recorded for many of the compds. 3555-t6-29, Isobenzofuran, 1,3,4,7-tetraphenyl-RL: PREP (Preparation)

(preparation of | RN 3586-66-1 CAPLUS

CN Isobenzofuran, 1.3.4.7-tetraphenyl- (CA INDEX NAME)



AUTHOR(S) CORPORATE SOURCE:

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L29 AMSWER 79 OF 81 CAPLUS COPYRIGHT 2011 ACS on SIN ACCESSION NUMBER: 1962:38203 CAPLUS Full-text DOCUMENT NUMBER: 56:38203

ORIGINAL REFERENCE NO.: 56:7177d-i.7178d-i TITLE-

Preparation of aromatic monocarbonyl and o-dicarbonyl

DOCUMENT TYPE:

E: Preparation of aromatic monocatomyl and o-dicatomyl compounds. II. Perparation of aromatic monocatomyl and o-dicatomyl compounds of the preparation of aromatic monocatomyl and o-dicatomyl compounds by delme synthesis Release Walter; Bommingausem, Marl Reins WANT STRE: Univ. Prandfart, Germany US: Justus Liebigs Annales der Chemie (1961), 633, 61-7 COREN JALREY; ISSN: 0075-641

MARI TIPE: Journal UMARI TIPE: Journal COMEN JALREY; ISSN: 0075-641

UMARI TIPE: Journal COMEN JALREY; Unaward of the Chemie (1961), 633, 61-7 COREN JALREY; Unaward of the Chemie (1961), 633, 61-7 COREN JALREY; UNAWARD COMEN JALREY; UNIV. 1961, 61-7 COREN JALREY; UNIV LANGUAGE: AB cf. CA 55, 12416f. and dihydroendoxonaphthalenes were prepared by diese syntheses. The course of the Duls-Alber reaction between dieses and dibenoxylacetylenes was eluvidated. 2.5-biphenyl-3.4-dipmylenecylopentaienose (II and (.tplbond.COCOM+12 (III) beated carefully until the gas evolution ceased, refluxed, and diluted with a small amount of EUB gas wer 885 5/6-(a,o'-diphenylene)-2/3'-di(carbmethoxylenylenylene) and B gave similarly 146 di-He eater (IV) of 3-sethyl-4/5, 6triphenylenelyhalic acid (V), an 127-4.5' (EUG, HedB). IV hydrolyzed with 1808 and the product recrystaf. from AcCO yielded 1004 amptries of V, n. 22-6' (EUG, HedB). V hydrolyzed with 1808 and the product recrystaf. from AcCO yielded 1004 amptries of V, n. 22-6' (EUG, HeDC). Pasted with a trace of hydrogui-none (VII), beated in vacoo, dissolved in 41 BCO-BEDO, heards several hrs. on the water bath with a slight encess of 1808, diluted with ECO, concentrated filtered, and acidified gave 764 5/6-dimethyl-1,4-dihydrophthalic acid (VIII), m. 190° (decomposition); method 8. The difference of the Conference of the 1.4-disydrophthalic acid (VIII), m. 198° (decomposition); method B. The di-Mester of 1.4-diphenyl-1.4-dibydrophthalic acid (IXI asponified with Maß8 yielded 38% 1.4-diphenylphthalic sahydride, m. 228-30°, also obtained from IX by refluxing several mrs. with SeO2 in AciD or mylenes, filtering hot, and concentrating to half-volume VIII ordisized with SeO2 and the product recrysta. From AciD gave 61% 5.6-dimethylphthalic anhydride, m. 212-13°. VII and II condensed by method 8 and the product refluxed 1-2 mrs. with SeO2 in AciD gave 61% 5.6-dimethylphthalic acid, m. 194-9° (M2DI. 2,3,4,5° Hartphenyl)colpest-dictionce (IX and I,12)book (22) bested to boiling and treated with PMMc gave 91% 2',3'-dibenonyl-5',6'-diphenylterphenyl (MII), m. 23-34° [PMMe]. III and KI gave similarly 18% 2)-dibenonyl-4.5,6-triphenylcolone, m. 251-3' [PMme, Bull). HII in MCKICKCOM refluxed about 1 hr. with excess McG, treated with excess activated In dust, the mixture refluxed 15 in., filtered bot, and acidified with AcO8 yielded 28% refluxed 15 min., filtered bot, and acidified with AcOH yielded 834 1,3,4,5,6,7-hexaphenylisobenzofuran, m. 254-7° (PhOMe, Ac20). (MeCH:CH)2 (XIII) and XI in PrOH containing a trace of VII refluxed 20 hrs. yielded 648 1,4-dimethyl-2,3-dibenzoyl-1,4-dihydrobenzene (KIV), m. 163-5° (Me2CO). (PhCH:CH)2 (KV) and KI in 1:1 Me0CH2CH2CH-PrOH refluxed 6 hrs. gave 594 1,4-

diphenyl-2,3-dimensupl-2,3-dimydrobenzee (NVI), n. 141-8° (CSMS patr. ether). NVI heated 6-7 hrs. in Decalin or 15 hrs. with 180% in ExoR gave 80 and 78.54, resp., 2,73-dimensupl temphonyl (NVII), n. 248-19° (CSGP-2), resp., 2,73-dimensuple rephonyl (NVII), n. 248-19° (CSGP-2), resp., 2,73-dimensuple rephonyl (NVII), n. 248-19° (CSGP-2), resp., 2,73-dimensuplemense (NVIII), n. 148-50° (RYGN), NVI refluxed vith Seo2 in sylene year 9.3 b.6-di-40° sacres of NVIII, n. 148-50° (RYGN), NVI refluxed vith Seo2 in sylene year 9.3 b.6-di-40° sacres of NVIII, n. 148-50° (RYGN), NVI refluxed vith Seo2 in sylene is 21 keOk-8-CO gave 70 k.1, 3,7-tetraphenylisobencotures (NVII), n. 258-6° (RMPR, MYMCH), also obtained in 50° yield by refluxing XVII about 1 hr. in PROS with excess 1808 and then 15 min. with active 1n dust, filtering, and actifying with AGGR. 6-7-Duselpell-4-ediphenyl-1,4-diphydro-1,4-monoco-2,3-dibencoplumphthalmen (XVII) treated with 1808 yielded 90% 5,6-dimethyl-1,3-dibencoplumphthalmen, n. 268-6° (ROM), size obtained in 58° yields by refluxing XV and XII 3-6 hrs. in 21 AcOR-8-CO, VII and XI in absolute BCGR refluxed 16 hrs. gave 40° XVX, n. 205-7° (CSGP-pcrt. + teher, ACCO). IVI and XI in accordance of XVX, n. 299-11° (ACCO). XVX and II gave by Reinde AI DVI, 4, 5, 8-ettraphenyl-1, 4-dimbydro-1,4-endoxo 2-extent boxypaphthalmen, n. 264-6° (ACCO). XVX and XII gave by Reinde AI DVI, 4, 5, 8-ettraphenyl-1, 4-dimbydro-1,4-endoxo 2-extent boxypaphthalmen, n. 264-6° (ACCO). XV and XVI refluxed 2 hrs. with a trace of VIII, expocated in vacco, the residue heated several hrs. on the water bath with a slight excess of BaO6, diluted with NCO, concentrated, actidified, and the product refluxed 1-2 hrs. with a trace of VIII, expocated in vacco, the residue heated several hrs. on the water bath with a slight excess of BaO6, diluted with NCO, concentrated, actidified, and the product refluxed 1-2 hrs. with a trace of VIII, expocated in vacco, the residue heated several hrs. on the water bath with a slight excess of BaO6, d diphenyl-2,3-dibenzoyl-2,3-dihydrobenzene (NVI), m. 147-8° (C6H6 petr. ether) diphenylterphenyl, m. 203-5° (PrOH)

(Derived from data in the 7th Collective Formula Index (1962-1966)) 13385-80-3 CAPLUS

obenzofuran, 1,3-bis([1,1'-biphenyl]-4-yl|-4,7-diphenyl- (CA INDEX



3506-66-09, Isobenzofuran, 1,3,4,7-tetraphenyl-18819-27-79, Isobenzofuran, hexaphenyl-RL: PREP (Preparation)

(preparation of) 3586-66-1 CAPLUS

Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



16619-87-7 CAPLUS

obenzofuran, 1,3,4,5,6,7-hexaphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

129 ANSWER 80 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 1962:38202 CAPLUS ACCESSION NUMBER:
DOCUMENT NUMBER:
ORIGINAL REFERENCE NO.:
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
DOCUMENT TAPE. 1902138202 CAPLUS 56:38202 56:7178b-c Liquid oligomers from 1,3-dienes Wittenberg, Dietmar; Mueller, Herbert Badische Anilin- & Soda-Fabrik A.-G. DOCUMENT TYPE: Patent Unavailable LANGUAGE: U FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| | | | | |
| DE 1109674 | | 19610629 | DE 1959-BSS991 | 19591222 |
| GB 892759 | | | GB | |
| US 3149173 | | 19640915 | US 1960-77269 | 19601221 |
| RIORITY APPLM. INFO.: | | | DE | 19591222 |

HITY APPM. IMPO.: 19 15951229
1.3-Diseas were polymerized in the presence of catalysts containing Ii, organic Al halides (Ia), and a metal of Groups I-III, or a compound capable of giving Ia complexes to give the title compute, susteril as intermediates in organic synthesis, as starting products in the rannfacture of textile and mineral auxiliary agents, or as bases for lacquers or resins. Thus, 1,3-butakies 142 was introduced during 35 min. at 50-5 into a finely ground mixture of TiCle 1.14, 30 algrains 2, ECCLBA 3.7, and CS665 50 parts. The nixture was stirred 30 min., diluted with 10 parts MeOH, and distilled to give 1,5,9-cyclododecatriene, b7 85°, n2DO 1.5074. Similarly, isopreme gave lowernol.-weight liquid polymers, b5 100-200°; b0-5 150-200°

(Derived from data in the 7th Collective Formula Index (1962-1966))

3586-66-1 CAPLUS
Isobenzofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)



L29 ANSWER 81 OF 81 CAPLUS COPYRIGHT 2011 ACS on STN

PRUS COPTRIGHT 2011 ACS on STN 1962:38201 CAPRUS 56:38201 56:3171b-c,1178a-b Olefin preparation by dehydration of alcohols Beranek, Ludvik; Bazant, Vladinir

Patent DOCUMENT TYPE: Unavailable LANGUAGE: Ur FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|------|-----------------|----------|
| | | | | |
| CS 98240 | | | CS | 19691111 |
| PRIORITY APPLN. INFO.: | | | CS | 19691111 |
| | | | | |

MITM PAPAN. INFO.:

Dehydration of alcos. in the gaseous class at increased temperature on Al200, 5100, 7100, alcomosilicates, and similar dehydration catalysts or their mixts, which are selectively descrivated by the addition of 1 + 10-8 - 504 pyridine, quinoline, or other hasis substances to the starting al.0 to prevent isomerization, gave olefins. When these basic compds. were added in vayor form, their partial pressure hasis substances to the starting al.0 to prevent isomerization, gave olefins. When these basic compds were added in vayor form, their partial pressure hasined by all thin with an inert compound with decreased partial pressure has the described by dilution with an inert compound or by vacuum. Thus, 91.5 g, mixture of 4-methyl-cyclobeanol and N in ratio 1:10 nelses, containing 0.14 mole of privation (calculated on 4-methylcyclobeanol), passed at 235° and 3.66 moles/hr./l. catalyst over 50 nl. activated Al200, which was descrivated 41 hrs. with 3201 l. N containing 1.37 g, pyridine, year 26 g, 1 quidd containing 94 4-methyl-cyclobeanon, free of isomers as confirmed by gas chronatography.

| NSOS-S4-i | Cherived from data in the 7th Collective Formula Index (1962-1966)| | 3886-66-1 CARUS | Isobeniofuran, 1,3,4,7-tetraphenyl- (CA INDEX NAME)

